

BLACK GOLD REVOLUTION:
WHAT NEW OIL MEANS FOR AMERICAN SECURITY POLICY

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APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.



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Abstract

The recent increase in American oil supply due to innovative extraction techniques will not reduce American international security commitments. Those oil-related commitments will remain regardless of America's import status because oil is fundamental to the American-led international order. The international order depends on institutions that rely on security and economic regimes to maintain stability, confidence and certainty. These concepts translate into economic transparency and trade. The global oil market lives within international trade, and has an interdependent relationship with the international order. Considering this, the idea that America would reduce security commitments because it has all the oil it needs is harmful to America and the order it leads.



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Introduction

I look forward to a great future for America - a future in which our country will match its military strength with our moral restraint, its wealth with our wisdom, its power with our purpose. –US President John F. Kennedy

On the evening of August 8, 2014, two very different scenes were unfolding. Separated by half a world, these scenes played out in North Dakota and Northern Iraq. In North Dakota, oil drillers were ecstatic, as oil production seemed to have no end in sight. In fact, American oil production had reached a point not seen since December of 1970.¹ American oil producers were within a few thousand barrels of topping 1970's production record. These were good times in North Dakota and for America. On the other side of the world, American F-18 fighter aircraft delivered several precision guided munitions on front line forces of the Islamic State in Iraq and Syria (ISIS). When asked, a senior White House official stated, "We will make sure that ISIS cannot approach Erbil."² Those in the energy world know that Erbil is the oil capital of Iraq and home of many international and American oil companies with a presence in Iraq.

These two events set up an interesting juxtaposition for America. If the United States can produce enough oil to satisfy its needs (the last time was December 1970), why does it need Iraqi oil? The follow-on question is if the United States does not need Iraqi or any imported oil, why does it have security commitments there? These questions have been asked since the 1970s, but America's recent energy revolution makes them more relevant. Thus begins my quest for answers to a deceptively simple question: what are the strategic security implications of America's energy revolution?

America's energy revolution has unexpectedly burst onto the scene within the last five years. Hydraulic fracturing and other enhanced oil recovery (EOR) techniques retrieve oil from previously untouchable places, moving America towards the stated goal

¹ EIA, "US Field Production of Petroleum," <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS1&f=M>, (accessed 6 Apr 2015).

² CBS News, "US Bombs ISIS fighters in Iraq," <http://www.cbsnews.com/news/us-airstrikes-will-make-sure-isis-cant-take-erbil-iraq-from-kurds/>, (accessed 6 Apr 2015).

of oil-independence. As a result, America now imports less oil (percentage) since any time after 1970. This should make Americans proud. Innovative workers, motivated by unique incentives and a refusal to accept failure, produced this revolution. Moreover, overcoming American dependence on oil imports has been the goal of every US administration since Richard Nixon.³ Some optimistic sources even predict that America could be oil-sufficient in the next ten years.⁴ Thus, the calls for American oil independence are becoming increasingly forceful.⁵

The attraction of oil independence is the insulation from price shocks and the supposed reduced security commitments in volatile regions. This concept offers promise and sounds logical. Does this theory withstand scrutiny? What are the second and third order effects if America reduces some of its commitments around the globe? The concept of American oil independence has dubious connotations. Hidden within this concept is the idea of oil nationalism. This implies the United States will keep most or all discovered oil for domestic uses. Incidentally, current laws forbid the export of American oil for this reason. Oil nationalism is dangerous because America has more at stake in the world than satisfying its demand for oil. The liberal international order is at stake.

I argue in this thesis that the American commitment to the international order should supersede concerns about oil independence. American security commitments are part of a greater institutional commitment that provides the world stability, confidence, and prosperity. Security alliances and treaties permit the international order to be liberal and permissive for economic transparency and trade. Moreover, trade brings much of the prestige American possesses today and is the result of institutional cooperation. Ideas like oil nationalism and independence are counter to the international order that America protects.

Since the late 1970s, cooperative institutional regimes and a broader liberal international order have backed the global oil market. Petroleum isolationism makes

³ Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World*, Upd ed. (New York: Penguin Books, 2012), 273.

⁴ Trevor Houser and Shashank Mohan, *Fueling Up: the Economic Implications of America's Oil and Gas Boom* (New York: Institute for International Economics, U.S., 2014), 153.

⁵ Clifford Krauss and Eric Lipton, "US Inches Toward Goal of Energy Independence," <http://www.nytimes.com/2012/03/23/business/energy-environment/inching-toward-energy-independence-in-america.html?pagewanted=all&r=0>, (accessed 21 January 2015).

little political and economic sense if a nation trusts the liberal order. Oil independence could spark competition and distrust within the liberal order. Furthermore, with the exception of urgent national security requirements, I argue that maintaining the order and furthering American prestige outweigh current environmental and moral objections to exporting oil.

To support these claims, I use international political theory framework as my methodology. International political theory offers connecting and explaining power to the world political economy today. Collective action theory was also considered but not used. While it has moderate explaining power, collective action does not connect to the world political economy as well as international political theory. While collective action theory can be used to explain why groups of people act a certain way, the connection to reality is sometimes blurry. However, as with any social science, proving causation is difficult based on the innumerable factors influencing decisions. Therefore, I acknowledge there will be gaps in the explanatory power, but feel that international political theory framework best defines, categorizes, explains and connects to reality.

In Chapter One, I introduce the theoretical framework and connect it with today's political economy and the oil market. I subsequently introduce the fundamental and technical aspects of the global oil market to demonstrate that oil trade exists in its present form because of the international order. Using the evolution of the oil market, I also show the inception of several nationalistic policies and their irrelevance today.

Chapter Two examines America's responsibility to the international order using the framework. By analyzing American security strategies and historical actions, I show that America would protect the international order regardless of oil import status. Likewise, I show that since oil enables the international order, America must also protect oil trade. America has an obligation to protect oil trade and the international order based on the interdependent relationship between the two.

Chapter Three tests the international political framework in a case study. The United Kingdom (UK) in the 1970s and 80s faced a similar situation to the United States today. North Sea oil discoveries forced the UK to contend with policy decisions concerning what to do with the oil. The UK also had security commitments to the

international order much the same as America. The results of this case study should yield valuable conclusions for American policymakers.

Finally, I draw implications for the United States as it approaches oil-sufficiency. Using the anticipatory power of the international political framework, I predict several strategic-level conclusions for the United States and its protection of the international order and oil. This section is relevant to strategists and policymakers alike.

My reason for writing this thesis is to explore the national security implications of American oil-sufficiency. Current literature refers to the economic and political domestic implications of America's oil boom. My point of departure is the security implications of the oil boom for the Department of Defense (DOD), since it is the security instrument for US enduring interests. Moreover, the international order is an enduring interest for America. Therefore, since changes in the dynamics of the oil markets provoke insecurity in nations (due to its vital nature), I want to explore oil's strategic level effects for the DOD. In doing so, I start with the hypothesis that America has more to protect in this world than just oil. Therefore little will change in the way of security commitments.

I use several assumptions in this thesis. First, the timeframe of this report extends only until 2035. The International Energy Agency (IEA) has done scholarly analysis only until this point; anything beyond 2035 is speculative.

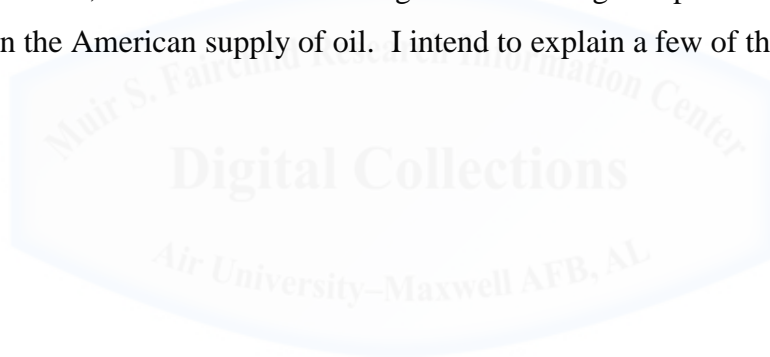
Second, the nation is the baseline unit of analysis. While major corporations are important actors in the oil industry, I instead focus on the nation for the sake of comparison. For instance, Saudi Arabia speaks under one oil minister, while United States does not. This gives the United States more agency and might yield dissimilar results. I have tried to note those few exceptions where they occur.

Third, I define the global oil market presented as normal market operations. Any oil crises since 1970, to include the plummeting oil price of early 2015, are aberrations since they seldom last longer than six months, and the market subsequently returns to normal operations. Post-1970, the oil market has behaved as depicted in Chapter One. I note exceptions, with reason, in either text or footnote.

My final assumption is that oil is separate from energy. Separating oil from the broader energy market is important for two reasons. First, oil is the largest component of energy in the world. The share is gradually decreasing, but for the timeframe of this

report, oil will likely remain king. Second, separating oil from total energy removes confusion from the analysis. Energy encompasses a myriad of factors that operate differently. For instance, natural gas markets behave differently because of the expense involved in transportation. Oil also has a global market price; natural gas has many regional spot prices. Moreover, oil is not a renewable resource as many newer sources of energy today are. Solar power distribution to the national electricity grid operates differently because it relies typically on a large sunk cost up front with little cost afterward. The same applies to wind and tidal energy. Overall, oil is the most important component of energy for now and thus warrants singular analysis.

Finally, I believe this paper has strategic significance to the United States and specifically the DOD. Politicians and senior military leaders speak of retrenchment and force structure while maintaining American influence throughout the world. Because of oil's importance, it would be foolish to ignore the strategic implications of the recent changes in the American supply of oil. I intend to explain a few of these implications.



Chapter 1

The Chicken or the Egg: International Order and Oil

To keep a lamp burning we have to keep putting oil in it. –George MacDonald, Scottish Novelist

Oil is critical to the world. An occasional look at one's daily activities reveals as much. Oil affects everything from the cars we drive, to the plastics we use, to the food we eat. Moreover, official sources state that oil demand will only increase as the global south begins to catch up to the north.¹ As oil demand increases, consumers and producers will rely on each other more and more. How do these parties engage in commerce? By the global oil market, which meets the needs of oil suppliers and consumers. While consumers today might think this is a simple transaction, this chapter argues the contrary: the oil market is a sophisticated product of the international order.

Oil trade exists in its present form because of the international order. The evolution of oil trade is a rich history full of competition and cooperation that offers valuable lessons for policymakers today. The history of this market saw America fall short as a global supplier and the consequences of producers using oil as an international political weapon. However, America used institutional cooperation, within the framework of the international order, to restore confidence in the market. Oil trade is now more diverse, efficient and profitable than ever. Consumers rely on the confidence of oil institutions, or regimes, to undergird petroleum trade. Without the regime, oil would certainly cost more or might not be available at all. Neither can happen in a world where oil is vital.

This chapter serves two purposes. First, I develop an international political framework to explain not only the actions of nations today but also to connect the global oil market to the world political economy. Second, I examine how the oil market evolved within the international order. This evolution is critical to the original question of this thesis along with policy choices surrounding America's engagement with the oil market.

¹ International Energy Agency, *World Energy Outlook 2013* (Paris: Organization for Economic, 2013), 56.

Furthermore, I add a technical framework of modern oil pricing system with security risks to the global oil market. Both purposes break down a complex market into a workable theoretical framework. This framework has deep roots in contemporary international political theory.

International Political Framework

Today's global oil market is a sophisticated trade operation that shows high market efficiency. With few exceptions, oil easily transcends traditional sovereign boundaries. I surmise that most people in the world only think of oil as they pump gas into their cars. Sometimes they pay more, sometimes less, but oil (or gas) is usually available. Few people likely give more thought to the mechanisms behind oil availability. This section explores this phenomenon through a lens of international politics. I also build a theoretical framework in which oil operates and answer the following question: how is it that such a vital commodity flows with seemingly so little effort?

The international order is the cornerstone of my theoretical framework. Many political thinkers have contributed analysis to this body of work. I begin with political theorist Hedley Bull, who defined international order as a “pattern of activity that sustains the elementary or primary goals of the society of states, or international society.”² He then defined the society of states as “a group of states, conscious of certain common interests and common values, [that] form a society in the sense that they conceive themselves to be bound by a common set of rules in their relations with one another, and share in the working of common institutions.”³ Bull's definition suggests that the international order provides stability, certainty and a structure centered on shared values or vision. Moreover, its goals are order preservation and security of the states and peace within the order.⁴ With these goals met, members will typically benefit in prosperity and security. While this definition provides a loose framework of order and structure, it does not give insight into the specific ways that nations form or maintain these rules or institutions. Categorizing different types of order addresses this problem.

² Hedley Bull, *The Anarchical Society: a Study of Order in World Politics*, 4th ed. (New York: Columbia University Press, 2012), 8.

³ Bull, 13.

⁴ Bull, 16.

According to political philosopher G. John Ikenberry, the three prevalent international orders are balance-of-power, hegemonic and constitutional.⁵ Each of these differs in the distribution of power. Balance-of-power theory revolves around the anarchic and competitive structure of the international system of states.⁶ There is no central authority to govern or produce order; therefore, states must act in a self-interested manner.⁷ Ikenberry explains, “order is based on the balancing actions of states—the necessary and inevitable outcome of states seeking to ensure security in an anarchic system.”⁸ Cooperation becomes a by-product of states aligning with other states and mutual interest. However, competition underlies balance-of-power, and alliances can easily shift depending on the relative power of nations. Balance-of-power represented the world order prior to World War I and II. Today, the balance-of-power theory of order struggles to connect with the international order. It also has poor explanatory power as to why nations turn to institutions first instead of shifting alliances.

Next, hegemonic orders differ from balance-of-power in that a leading nation wields the preponderance of power within the international system. Ikenberry defines hegemonic order as “based on the distribution of power among states, but it operates according to a very different logic: the relations of power and authority are defined by the organizing principle of hierarchy.”⁹ Persia, Rome, and England are historical examples of hegemonic orders. Political theorist Robert Gilpin describes the history of hegemonic orders as “the evolution of any system. . . characterized by successive rises of powerful states that have governed the system and have determined the patterns of international interactions and established the rules of the system.”¹⁰ Gilpin also adds a second dimension to power. He introduces the concept of *prestige* and argues, “prestige is the reputation for power, and military power in particular.”¹¹ He points to how a hegemon takes and holds order: “prestige is largely a function of economic and military

⁵ G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars* (New York: Princeton University Press, 2001), 23.

⁶ Kenneth N. Waltz, *Theory of International Politics* (New York: Waveland Pr Inc, 2010), 95.

⁷ Waltz.

⁸ Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars*, 25.

⁹ Ikenberry, 26.

¹⁰ Robert Gilpin, *War and Change in World Politics*, Reprint ed. (Cambridge: Cambridge University Press, 1983), 42-43.

¹¹ Gilpin, 31.

capabilities . . . achieved primarily through successful use of power, and especially through victory in war.”¹² Furthermore, when hegemons begin to decline, prestige lags actual power.¹³ Subordinate nations may still give a hegemon prestige even though power, economic and military, wanes. Once prestige falls, the hegemon cannot cope with rising states seeking to change the order. A grave threat to the order emerges when enough nations, or a powerful nation, decide to pursue an alternative order. Gilpin observes that change of an order occurs when “a state will attempt to change the international system if the expected benefits exceed the expected costs (i.e., if there is an expected net gain).”¹⁴ This change in world order can be peaceful, but historically this change has resulted in general war.¹⁵ Therefore, as a new hegemon emerges, from either war or peaceful transition, it must consider Gilpin’s concept of prestige to retain influence. This consideration leads to the final order, a constitutional type.

Ikenberry’s third international order is a constitutional type that binds states via institutions. Leading states form constitutional orders based on the power and prestige required to influence other states.¹⁶ This influence initially draws other nations to follow the leading state’s rules and norms. Ikenberry defines a constitutional order as “political orders organized around agreed-upon legal and political institutions that operate to allocate rights and limit the exercise of power.”¹⁷ He goes on: “A constitutional order is neither identified nor ensured by the existence of a constitutional document or charter—although constitutional orders may in fact have a written constitution—but by the way in which agreed-upon and institutionalized rules, rights, protections, and commitments combine to shape and circumscribe the wielding of power within the order.”¹⁸ Examples of institutions are “treaties, interlocking organizations, joint management responsibilities, agreed upon standards and principles of relations.”¹⁹ Furthermore, when states

¹² Gilpin, 32.

¹³ Gilpin, 33.

¹⁴ Gilpin, 10.

¹⁵ Gilpin, 197, 206.

¹⁶ Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars*,

¹⁷ Ikenberry, 29.

¹⁸ Ikenberry.

¹⁹ Ikenberry, 41.

participate in these institutions, they commit to following the rules, primarily because of the benefits they receive.²⁰

States willingly participate in the order to capitalize on good faith by the leading state. The leading state restrains its power through institutions, by conceding it to less powerful states. These institutions give weaker states influence in decision making within the order or favorable trade conditions and protection. Ikenberry explains “the leading state lowers its enforcement costs in a constitutional order by giving weaker states a stake in the system and gaining their overall support.”²¹ He goes on to explain a self-interested reason that a leading state uses institutions: “the leading state calculates that its heightened postwar power advantages are momentary, [but] an institutional order might lock in favorable agreements that continue beyond its zenith of power.”²² Nonetheless, the leading state gives assurances to weaker ones to not dominate or abandon them.

Institutions also serve as investments by the leading state to extend its power. Ikenberry illustrates this investment value explaining

Institution building is a form of investment because rules and institutions are sticky, at least to some extent. Unless there is a substantial shift in state power and interests, postwar institutions are likely to persist and continue in shape and constrain state action even after the power that created them has declined. . . institutions become embedded in the wider political order, where through the process of feedback and increasing return to institution states find that the costs of changing those institutions can grow over time, thereby increasing the shaping and constraining role of institutions. Overall, the leading state extends the time horizon by which it calculates its interest. Weaker and secondary states are offered a good deal today in exchange for compliant behavior in the future.²³

While the leading state is concerned with its interest, this explanation by Ikenberry partially identifies why institutions are more entrenched than balance-of-power cooperation. Both parties have a stake in institutions, deepening their ties and becoming stickier.

²⁰ Ikenberry, 55.

²¹ Ikenberry, 54.

²² Ikenberry.

²³ Ikenberry, 55-56. Ikenberry acknowledges the realism present in his description. The leading state is clearly after its own interest and other benefit from this.

Moreover, the institutions that comprise a constitutional order are typically international regimes. Political theorist Stephen Krasner defines international regimes as “sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice.”²⁴ Speaking of the utility of regimes, Robert Keohane proposes that “International regimes perform the valuable functions of reducing the costs of legitimate transactions while increasing the costs of illegitimate ones, and of reducing uncertainty.”²⁵ Regimes, no matter the category, provide nations the means to obtain a goal within an agreed upon framework. They also provide a structure for nations to adjust policies to facilitate collective action with minimal discord.²⁶ Since participants in a regime have the same principle, they are more likely to communicate and cooperate when policies differ. Without the regime, competition and misperception are probable as the international political system still has anarchic tendencies.²⁷

Regimes discourage rogue actions by imposing additional costs on illegitimate transactions. Tariffs within trade agreements are an example. Therefore, nations conform to regime rules and norms unless they deem the cost reasonable. If a nation, or group of nations, desire a new set of principles, norms, rules and decision-making, it must present an alternative that likely involves increased costs.²⁸

Furthermore, there are several categories of regimes. The two international regimes relevant to this work are military, or security, and economic. Environmental, social and justice are also types of regimes, but the focus of this thesis is security and economic. Incidentally, Ikenberry points to security regimes as the most important and

²⁴ Stephen D. Krasner, ed., *International Regimes (Cornell Studies in Political Economy)* (New York: Cornell University Press, 1983), 2.

²⁵ Robert O. Keohane and with a new preface by the author, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, NJ: Princeton University Press, 2005), 59.

²⁶ Keohane, 51-52.

²⁷ This thesis takes a decidedly liberal stance in stating that regimes facilitate cooperation that would not have occurred between states in a balance-of-power or hegemonic stability order. While a philosophical question, this author thinks the shared interest and communication channels are a good to have.

²⁸ Since regimes become sticky, there is a higher cost associated with replacing the current regime with an alternative. Participants are used to certain rules and norms, thus the high costs to overcome them.

far-reaching.²⁹ By defining principles, rules, norms and decision-making among participants, security regimes represent powerful forces within the international order. These regimes can be treaties, formal alliances or security umbrellas. With assurance against abandonment, weaker states have more incentive to participate in collective security. Smaller security costs arise based on leading state guarantees. Moreover, smaller security forces within weaker states typically lessen the potential for war, based on fewer means to make war. This also has a positive effect on economic prosperity, as will be examined shortly. Ultimately, the leading state benefits from the absence of high intervention costs for the sake of order preservation.

Other theorists also indicate the importance of security regimes through basic societal instincts. Political scientist John Mearsheimer postulates the top priority of a state is survival in the anarchic world.³⁰ Since nations are insecure, they compete for hegemony.³¹ Thucydides also famously proclaimed that fear, honor and interest were the primary human motivators.³² Using his history from the Greek peninsula, fear motivated Sparta and Athens to go to war. Furthermore, political scientist Robert Jervis speaks of the spiral-of-security dilemma when states fear each other with little restraint.³³ Fear is a powerful motivator, and thus provides the attraction of security regimes without the uncertainty and instability.

Security regimes also have principles, norms, rules and procedures. The North Atlantic Treaty Organization (NATO) is an example. While an official alliance, the regime's principle is security. However, NATO's mission has also evolved with its members' desires. Originally intended to deter Soviet aggression and re-integrate Germany into Europe, NATO has evolved to a range of activities from human rights enforcement to nation building in the Middle East. Regimes allow this because they provide a structure for participants to adjust policies, thereby facilitating cooperation.³⁴

²⁹ Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major War*, 41.

³⁰ John J. Mearsheimer, *The Tragedy of Great Power Politics (Updated Edition)*, Updated ed. (New York: W. W. Norton & Company, 2014), 31.

³¹ Mearsheimer, 33-35.

³² Thucydides, *The Landmark Thucydides: a Comprehensive Guide to the Peloponnesian War* (New York: Free Press, 1998), 16.

³³ Robert Jervis, *Perception and Misperception in International Politics (Center for International Affairs, Harvard University)* (Princeton, NJ: Princeton University Press, 1976), 67-76.

³⁴ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 52-53.

Ikenberry gives additional evidence for the importance of security guarantees by placing them in historical context. He argues the major flaw following World War I settlement was that it contained no formal security agreements.³⁵ Following World War II, America played the leading role in supporting NATO and gave Japan and the Philippines security guarantees. These binding security agreements helped foster the prosperous post-World War II economic order in place today.

However, security cooperation can happen outside of regimes and often does. Consider the United States invasion of Iraq in 2003. The United States did not call for any regime to help it, and instead relied on a coalition of the willing, most prominently the United Kingdom. Security cooperation often does involve military regimes. NATO's humanitarian interventions in Kosovo and Libya along with the rebuilding of Afghanistan are examples of institutional use of force. This brings up a seeming contradiction within this framework. If the international order today is a constitutional order, how is the non-institutional use of force explained? According to institutional theory, if the international political order were a constitutional order, these actions would increase the costs for the actor. This occurs today as states that act unilaterally are often penalized with lowered prestige or sanctions. Both hurt a nation in the world political economy. So what motivates states to act outside of institutions?

States use force, outside of institutions, to protect their interests. Some interests are more vital than others are, as Robert Art put forth with his definition of vital interest.³⁶ A threat to a state's vital interest usually results in the threat, or the use, of force. This concept fits with the constitutional order presented by this work. A leading state that extends a constitutional order by divesting its power in terms of military and economic regimes should promote stability. While the order cannot rule out aggression, it becomes the exception. Remembering that regimes increase the cost of illegitimate transaction by isolating the perpetrator, this falls in line with the logic of constitutional order. However, when the leading state perceives a threat to its interest that institutions

³⁵ Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major War* 160.

³⁶ Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force: Military Power and International Politics*, 7th ed. (Lanham, MD: Rowman & Littlefield Publishers, 2009), 153. Robert Art defines a vital interest as "those whose costs to the nation are somewhere between severe to catastrophic if not protected and whose benefits are large when protected."

do not address, regardless of the reason, it must either act on its own or create a regime. The creation of a regime to address the threat will facilitate the original motive behind a constitutional order: extend the power of the leading state beyond its decline.

Connecting economic to security regimes is a natural progression within a constitutional order. Consider the following logic. Gilpin argues that the international order has increased its reliance on economic prosperity.³⁷ The foundations of this economic prosperity are the institutional regimes that the leading state formed. Security and economic regimes worked together to bring economic prosperity, just as Ikenberry argued.³⁸ In other words, as security regimes dampened traditional security problems, the economic regimes flourished based on the stability. Economic regimes thus fostered economic prosperity while furthering the international order through sticky institutions.³⁹ Ikenberry explains this process as the phenomenon of “increasing returns” to institutions with “more people and more activities. . . hooked into the institution and its operations. A wider array of individuals and groups, in more countries and more realms of activity, have a stake—or a vested interest—in the continuation of the institution.”⁴⁰ As this occurs, the leading state should offer security to the ever-increasing institutions. While this concept explains why the institutional order is difficult to change, it can also explain the leading state’s stake in the order.

The liberal economic international order today has its roots in the post-World War II economic regimes. Gilpin points to the leading state’s incentives for creating these regimes, arguing “the United States created and enforced the rules of a liberal international economic order. [British and] American policies fostered free trade and freedom of capital movements. These great powers supplied the key currency and managed the international monetary system. . . . While bringing benefits to themselves, however, the policies of the hegemonic powers were also beneficial to those other states that desired to and could take advantage of the international political and economic status

³⁷ Gilpin, *War and Change in World Politics*, 32.

³⁸ Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major War*, 210-214. See the Bretton Woods description for details.

³⁹ Institutions are sticky because they begin to influence all transactions around them, thus becoming more deeply embedded in the order.

⁴⁰ Ikenberry, 70.

quo.”⁴¹ Ikenberry offers the Bretton Woods agreements as an illustrative example of economic regimes. He states:

The Bretton Woods agreements were important because they served as a basis for building broader coalitions around a relatively open and managed order. It was a middle path that generated support from both the conservative free traders and the new enthusiasts of economic planning. It was agreed that just lowering barriers to trade and capital movements was not enough. The leading industrial states must actively supervise and govern the system. Institutions, rules, and active involvement of governments were necessary. One lesson came from the 1930s: the fear of economic contagion, where unwise or untoward policies pursued by one country threatened the stability of others. As Roosevelt said at the opening of the Bretton Woods conference, “the economic health of every country is a proper matter of concern to all its neighbors, near and far.” Security officials came to this view by recognizing that the greatest security threats to Europe (and indirectly the United States) came from inside these societies, through economic crisis and political disarray.⁴²

Economic stability formed the foundation of the stable international order, and the United States reinforced it with security and economic institutions. Since NATO deployed American troops to European soil, the commitment of America to defend Europe was credible. Furthermore, this provided the stability needed to re-accept Germany into Europe and regionally integrate the European Continent.⁴³ Much the same was occurring in Asia with the post-war settlement.

Moreover, economic regimes benefit all involved due to lower transaction costs, but the main beneficiary is the leading state. Since the regime typically adopts the leading state’s monetary policy, the regime benefits from a rush of currency. Prestige increases as the leading state’s wealth increases. As prestige increases, so does the leading state’s ability to maintain the international order according to its desire.

The post-World War II settlement formed today’s international order. The United States emerged as the leading state, as its military and economic power and prestige were unmatched. America spent the next five years building the security and economic

⁴¹ Gilpin, *War and Change in World Politics*, 145.

⁴² Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major War*, 191.

⁴³ Ikenberry, 206.

regimes that still exist today.⁴⁴ Even after the Cold War, security and economic regimes expanded as former Warsaw Pact countries desired membership. In return for security guarantees, these countries conformed to rules and norms of the regimes.⁴⁵ Both balance-of-power and hegemonic orders have difficulty explaining this.

Within the post-World War II settlement, the effects of regimes in economic openness and stability from security are visible. The world expects this order, and indeed the regimes have become sticky. This order is now entrenched and America backs the order by involvement in security and economic institutions. Furthermore, America even backs the order without institutions because the order furthers the United States' return on investment in the form of power and prestige.⁴⁶ Let us connect this theory to the subject of this thesis: oil trade.

Oil markets utilize the open trade system erected by the post-World War II international order. The market does not use a closed, contract trade system, but instead relies on a marketplace pricing.⁴⁷ Much like other traded commodities, oil also relies on regimes to ensure open trade. Without open trade, oil prices would likely rise as suppliers pushed their stock to preset consumers. Furthermore, security of the oil trade rests on the international order. Since oil requires global transportation, trade is as much security as economic. With the international political framework and basic oil trade operation in mind, let us explain the phenomenon of the global oil market.

The Global Oil Market

Access to oil is a security matter for a nation. Without oil, nations would look vastly different than they appear today. A nation charged with the security of its people, and arguably its way of life, probably considers oil a high priority. Nations must,

⁴⁴ Ikenberry, 200-203

⁴⁵ The 1997 NATO expansion is an example. Nations traded security agreements for market reforms within their borders. This furthers the institution if all play by the same norms and rules. The North American Free Trade Agreement (NAFTA) is an example of economic regimes. By opening trade with Mexico, the United States brought favorable trade in return for reforms. Finally, the World Trade Organization (WTO) brought far-reaching dispute arbitration capability. Favored by all parties for different reasons; namely the United States would have better enforcement power and the Europeans could limit US power by the same mechanism. Ikenberry, 240-245.

⁴⁶ This is a decidedly realist argument. Since the order returns so much power and prestige to America, it acts independently at times to maintain and enforce order.

⁴⁷ Eastern European nations rely on contract oil from Russia. Oil is not purchased from a market, with a market price; instead, it is purchased in advance of a negotiated contract price. Sometimes the contract price is below the global price while other times it is above. One consideration with contract oil is the lack of supply diversity. In other words, consumers are at the mercy of suppliers.

therefore, engage the international system to secure oil from beyond its borders.

Keohane postulates that nations cannot leave vital commodities to the free markets, but must negotiate them at the policy level.⁴⁸ Keohane's theory thus further connects oil trade to the realm of the international political system.

The global oil market accordingly resides within the international order. After all, states that are not oil-sufficient must decide on their sourcing. Logically, it seems most countries would like to be oil-sufficient and not have to negotiate with other countries for oil. As the adage goes, "why depend on others if you can provide for yourself?" If oil-sufficient, countries could separate oil from international politics because there are no imports to negotiate. Nonetheless, not all countries are, or will ever be, oil-sufficient. Those oil-deficient countries have to negotiate and participate in the oil trade. Should these countries be concerned about the influence of international politics on their imported oil? The surprising answer is that international politics matters less to oil trade today than almost any other time in history. The reason lies in the current constitutional, international order and the influence of international regimes.

As described earlier, political scientists characterize today's liberal international order as economic interdependence stemming from international regimes. Furthermore, there are few credible threats looking to spurn the cooperation provided by regimes for competition and replace the current order with an alternative. Correspondingly, international regimes such as the International Energy Agency (IEA), World Trade Organization, and the World Bank help to hold the liberal order firmly in place.⁴⁹ While nations occasionally act with self-interest, most are agreeable to international regimes based on the economic benefits they receive and the costs of not following the rules. Furthermore, a systemic change in the current order does not appear to be looming from any competitors.⁵⁰

The evolution of the global oil market reflects the stability that international regimes provide. After 1945, America instituted an international regime for global oil

⁴⁸ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 50.

⁴⁹ Keohane, 59.

⁵⁰ As of March 2015, China has over twenty signatories on the Asian Infrastructure Development Bank (AIDB). This bank directly competes with the World Bank. China is the originator and seems to desire the same level of prestige that the United States enjoys through institutional regimes. The United States is opposed to the AIDB because it lacks the transparency and standards of the World Bank.

trade with American rules and norms. Since the United States was the leading state of the non-Soviet world, it easily facilitated cooperation into the global market. After all, the United States had the oil, the military, and economic power, and the prestige to form and enable the regime. Furthermore, prior to 1970s, US oil production underwrote the relatively cheap oil that the world enjoyed. If global demand increased, the United States produced more oil to satiate the demand. However, around 1970, American oil production decreased as supplies were exhausted. Most of the world was oblivious to the fact. The events of 1973 tested the liberal order and the current hegemonic regime as few could have imagined.

The Arab Oil Embargo of 1973, which was in response to American (and Dutch) support of Israel during the Yom Kippur War, galvanized the use of oil as an instrument of international politics. By using oil to affect the economic and arguably national security of the United States and its allies, the Arabs successfully pitted allies in competition against each other for oil. Robert Keohane explains that “the consuming countries were unable to solve the dilemma of collective action: in trying individually to save themselves, they contributed to the quadrupling of official prices.”⁵¹ He goes on further to assert that “the crisis illustrates the severity of the dilemma of collective action when uncertainty is high and no institutions for reducing it exists. Each country followed the defecting strategy of Prisoner’s Dilemma, fearing that if it failed to get preferential treatment for itself, it would wind up with the “sucker’s payoff” of oil shortages.”⁵² The current regime required a complete overhaul because the principles, norms, rules and procedures had all changed overnight. Despite national calls for oil independence, an American-led consortium simultaneously pursued an institutional path. This path led to the formation of the IEA, which sought to provide information, rules and emergency stockpiles for member nations. The IEA proved its worth during the oil crises of 1979 and 1980 by ensuring cooperation between consumers when oil supplies were short, thus maintaining a lower oil price.⁵³

The creation of the IEA, an international regime, modified the framework on which the modern oil trade rests. The IEA bolstered global consumers’ confidence that

⁵¹ Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, 223.

⁵² Keohane.

⁵³ Keohane, 236.

international politics and oil were stable and predictable. First, the IEA served as a deterrent against hostile collective action by the Arab nations of Organization of Petroleum Exporting Countries (OPEC). (Ironically, OPEC represented an oil producers' regime while the IEA represented a consumers' regime. Political theorists today sometimes characterize OPEC today more by cartel, or price-fixing for profit, policies than regimes.) Emergency stocks were in place, and the IEA could coordinate a release to relieve a short-term price spike. Second, member countries would be encouraged to cooperate because of less uncertainty as the IEA distributed critical information, thus alleviating the dilemma of 1973.⁵⁴ The overall effect was that countries felt more secure about open oil trade moving into the late 1980s and beyond. Moreover, a robust, integrated global distribution system came online during this time further reinforcing the liberalized oil trade. Consequently, an international regime reinforced the liberal order and quietly sidestepped the public calls for oil independence. Incidentally, the IEA has used a coordinated release of emergency oil stocks three times since 1973: the 1991 Persian Gulf War, Hurricanes Katrina and Rita in 2005 and the NATO's Libyan intervention of 2011.⁵⁵ All episodes curbed the economic effects of physical shortages.⁵⁶

Oil Security

If oil is critical to the world, then access is also essential. The consequences of losing access to oil can be devastating. Therefore, securing access to oil should be a priority for any nation. The IEA defines energy security as "as the uninterrupted availability of energy sources at an affordable price."⁵⁷ To put it differently, access to oil has two major dimensions, physical and economic.

Therefore, physical access and economic access work in unison. The Oil Crisis of 1973 illustrates this dual nature of oil security. During the embargo, the Arab members of OPEC stopped shipment of all oil to the US.⁵⁸ The price of oil tripled nearly overnight

⁵⁴ Daniel Yergin, *The Quest: Energy, Security and the Remaking of the Modern World* (New York: The Penguin Press, 2011), 277.

⁵⁵ Yergin, 273.

⁵⁶ IEA, "Member Country Requirements," <http://www.iea.org/aboutus/faqs/membership/>, (accessed 9 January 2015). This works in the short-term, not in the long-term. The IEA does not require more than 90 days of reserves per country.

⁵⁷ IEA, "Energy Security," <http://www.iea.org/topics/energysecurity/> (accessed 7 January 2015).

⁵⁸ Daniel Yergin, *The Prize: the Epic Quest for Oil, Money and Power*, (New York: Free Press, 1991), 608. The Arab portion of OPEC decided to embargo the United States because of its support for Israel.

in the US.⁵⁹ While oil availability still existed globally, access to cheap oil from OPEC was gone, thus causing the dramatic price increase.⁶⁰ Within the US, motorists filled their gas tanks daily, thinking that prices would be higher the next day while worrying about future gasoline availability.⁶¹ This episode captures the interdependent relationship of physical and economic access. Because oil trade is an elastic function, as demand increases so will the price until supply catches up. Since the market is diversified, supply will usually catch up within a few days. However, the fear of an oil scarcity promotes more and more demand, thus causing the system to recover slowly. This caused the price increases associated with the 1970s oil crises. Post-1973, over 20 nations formed the IEA and required member countries to hold oil stocks to act as a buffer to physical access limitations. A primary purpose of the IEA is to ensure members have short-term oil security.

Furthermore, the international order and regimes provide oil security in different ways. The IEA, the consumer's oil regime, provides short-term security in the form of emergency stock releases (commonly referred to as the Strategic Petroleum Reserve, or SPR). Should a member nation be confronted with an exorbitantly high price due to the shortage, a release could lower it. Furthermore, this short-term relief provides a buffer against aggressive action by a producer's regime. The international order, while supported by the IEA, would likely use an institutional response to a long-term threat (such as ISIS capturing Iraq's Basra production facilities). However, a non-institutional response is not impossible; though the nation initiating the action would be confronted by the cost of an illegitimate action.

Oil security also hinges on producers having access to consumers. Producers transport oil by three means: oversea shipping, pipeline, and overland. While pipeline is the most economical, it is impractical for intercontinental transportation. Political borders, taxes, and geography are a few of the obstacles to worldwide pipelines. This leaves shipping as the next best choice. As of 2013, shipping accounted for two-thirds of

⁵⁹ EIA, "History of the Price of Oil," http://www.eia.gov/finance/markets/spot_prices.cfm (accessed 9 January 2015).

⁶⁰ Oil from large and established reservoirs is less expensive to extract. Newer oil fields incorporate startup costs and have less economies of scale. For example, Saudi Arabian giant field oil cost around \$20 per barrel to extract while tight oil in North Dakota may cost \$60 per barrel.

⁶¹ Yergin, *The Prize*, 617.

the oil transportation between exporters and importers.⁶² Moreover, much of that shipping passed through chokepoints that are subject to compromise. Figure 1 represents the major maritime strategic oil chokepoints. Note that approximately 19 percent of the global oil supply passes the Straits of Hormuz daily.⁶³ A compromised chokepoint, by either an actor or natural disaster, could jeopardize access to affordable oil. While nations may be able physically to obtain oil, the price increase would be tremendous and current regimes would be under pressure for relief.

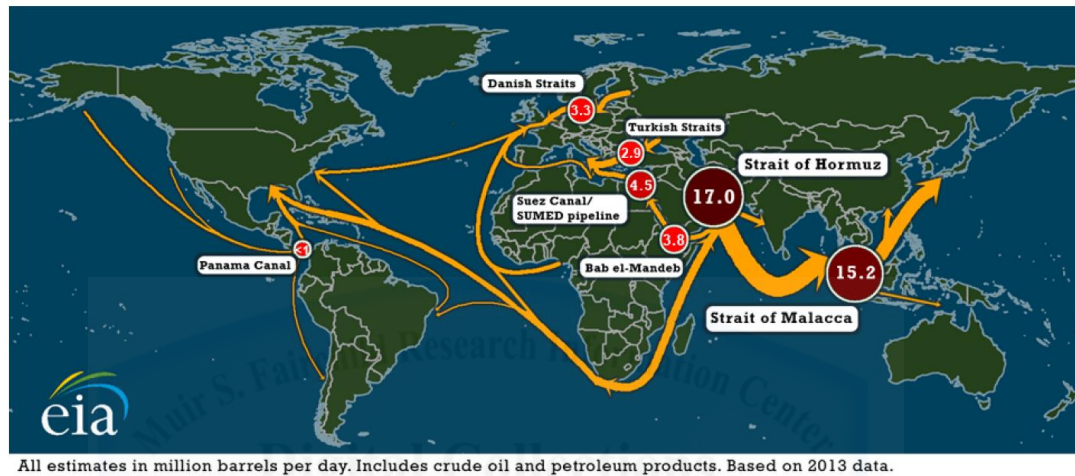


Figure 1. Global Petroleum Strategic Chokepoints

Source: (Adapted from Energy Information Agency (EIA), “World Oil Chokepoints,” <http://www.eia.gov/todayinenergy/detail.cfm?id=18991>.)

Consequently, since oil prices are subject to global availability, oil-importing countries often diversify sourcing. Over one hundred years ago, Winston Churchill prophetically said, “On no one quality, on no one process, on no one country, on no one route, and on no one field must we be dependent. . . Safety and certainty in oil lie in variety and variety alone.”⁶⁴ Churchill’s comments on diversification are the cornerstone of the current global oil trade. In fact, most IEA and Organization for Economic Cooperation and Development (OECD) nations are highly diversified with imports from

⁶² EIA, “World Oil Chokepoints,” <http://www.eia.gov/todayinenergy/detail.cfm?id=18991>, (accessed 9 January 2015).

⁶³ EIA.

⁶⁴ UK Parliamentary Debates, Commons, July 17, 1913, pp. 1474-77.

at least ten countries.⁶⁵ Diversification lessens the risk of losing oil access and helps control the price of oil.

The Price of Oil

While the international order sets the fundamental framework in which oil trade operates, understanding the technical aspects of the global oil market is also helpful. Oil consumers rely on a large diversity of sources for both economic and security reasons. While international regimes, such as the IEA, have reduced the security costs associated with the oil market by establishing rules and norms, security threats still remain in the form of hostile state and non-state actors and natural disasters. For example, if the majority of a nation's oil comes from a specific region and a typhoon knocks out production facilities, it would behoove that nation to have other sources of oil. Diversity for economic reasons also helps keep the global price lower if a major supplier decides to cut production and cause a shortage. Nevertheless, the diversity of oil supply makes oil a fungible commodity. The following analogy may be helpful in understanding the fungible nature of the global oil trade.

This fungible character of global oil is much like a fruit market with many suppliers and a common price. The absence of one supplier does not devastate consumers; the consumer just moves on to the next supplier. However, if too many suppliers are absent, the price increases due to limited supply. Fruit consumer regimes can be thought of as consumers keeping an extra supply of fruit on the side, just in case a significant number of suppliers are missing. The oil market functions much the same way, albeit on a global scale.

An episode that demonstrates the cooperative nature of the global oil market and the overall international order was the response to Hurricanes Rita and Katrina of 2005. The hurricanes knocked the Gulf of Mexico coastline refineries offline for three weeks causing a major disruption in the supply of oil. Pundits predicted critical shortages causing high prices, possible rationing and gas lines. However, this did not happen. Energy historian Daniel Yergin offers the following observation: "Instead of adding new regulatory restrictions—two critical ones were eased. Non-U.S.-flagged tankers were

⁶⁵ IEA, "2013 Annual Oil Data," <http://www.iea.org/media/statistics/surveys/oil/oilsurv.pdf>, (accessed 9 January 2015). OECD represents over 25 member nations that make up most of the advanced economies in the world.

permitted to pick up supplies trapped on the Gulf Coast by the non-operation of pipelines and carry them around Florida to the East Coast. The boutique gasoline regulation, requiring different blends of gasolines for different cities, was temporarily lifted to allow shifting of supplies from cities that were relatively well supplied to cities where there were potential shortages. Overall, the calls for controls were resisted. The markets moved back into balance much sooner; prices came down much faster than had been expected.”⁶⁶ The IEA coordinated an oil emergency stock release as well. Episodes like this occur yearly worldwide and demonstrate the cooperation that regimes bring to the international order.

As for the technical aspects of the oil market, price best explains it. In the simplest form, oil derives its price from a supply and demand equation. The more the world requires oil, the more the price increases. If too much supply exists, the price will decrease. In reality though, oil prices follow a much more complex supply and demand formula. Figure 2 offers a rendering of how the market determines the price of oil.



Figure 2. What Drives Crude Oil Prices

Source: (Adapted from EIA, <http://www.eia.gov/finance/markets/>.)

Above all, stable oil prices rely on suppliers’ spare capacity. The EIA defines spare capacity as “the volume of production that can be brought on within 30 days and sustained for at least 90 days. Saudi Arabia, the largest oil producer within OPEC and

⁶⁶ Yergin, *The Quest*, 277.

the world's largest oil exporter, historically has had the greatest spare capacity. Saudi Arabia has usually kept more than 1.5 - 2 million barrels per day of spare capacity on hand for market management.”⁶⁷ Until recently, Saudi Arabia possessed the world's largest proven reserves of crude oil. Venezuela now holds the largest proven reserves in the world but cannot match the Saudi ability to leverage spare capacity. The reasons lie in economies of scale, production and storage costs.

To illustrate the spare capacity concept, if all oil suppliers decided to produce as much oil as physically possible, oil prices would tumble. While this might seem a good idea on the surface, two problems lurk. First, demand would likely exhaust global oil reserves long before predictions.⁶⁸ Second, there would be no spare supply capacity to accommodate an increased demand. Prices would rise as demand surpassed supply. History is replete with examples of overproduction periods that cut producers' revenue causing unsustainable operations.⁶⁹ A more stable model is maintaining a spare capacity that can surge in case of increased demand or decreased regional supply. Today, international markets maintain this supply by the combination of two distinct oil supply entities.

OPEC and non-OPEC sources combine supply to meet the world oil demand. Founded in 1960, OPEC represents a collection of 12 countries that export oil to meet global demand. Prior to 1960, International Oil Companies (IOCs) could set low oil prices, driving revenues down to the cost to exporting countries. To prevent this, major exporting countries formed OPEC and quotas were configured to manage the price of oil.⁷⁰ Since the exhaustion of US spare capacity, OPEC has maintained the world's spare capacity as depicted in Figure 3. In fact, OPEC maintains three-quarters of the world's proven oil reserves and just under half of global crude production.⁷¹ When global

⁶⁷ EIA, “What Drives Crude Oil Prices: Supply OPEC,” <http://www.eia.gov/finance/markets/supply-opec.cfm>, (accessed 10 January 2015).

⁶⁸ Oil fields operated at maximum production levels seldom go down for maintenance. This produces a suboptimum withdrawal from the field often leaving much wasted oil.

⁶⁹ Since the discovery of oil, producers have often tried to increase profits by increasing production. Competitors counter this with their own increase, thus creating an oversupply and subsequent decrease in prices. In order to maintain profit levels in the face of price decreases, production must increase, further exacerbating the problem.

⁷⁰ Yergin, *The Quest*, 270.

⁷¹ EIA, “World Oil Market,” http://www.eia.gov/energy_in_brief/article/world_oil_market.cfm, (accessed 10 January 2015).

demand rises, OPEC will respond with a “call,” which means an increased supply. When supply needs to decrease, OPEC increases the spare capacity. This cycle is the normal operating procedure referred to in the introduction. This helps OPEC members maintain a predictable oil price for revenues and investment.

Non-OPEC countries produce oil at consistent levels. According to Figure 3, these can produce at optimum levels for their business model while not having to worry about the spare capacity in the market. By using a combination of IOCs and government-owned National Oil Companies (NOC), producers can produce as long as the price is economical.⁷² As of 2013, non-OPEC production accounts for two-thirds of global supply. Even though non-OPEC supplies over half of the world oil, the supply-side price is still heavily dependent on OPEC spare capacity. Only macro-trends can change this part of the oil pricing model, for example, a large supply increase from a non-OPEC country that would reduce the impact of OPEC’s spare margins.

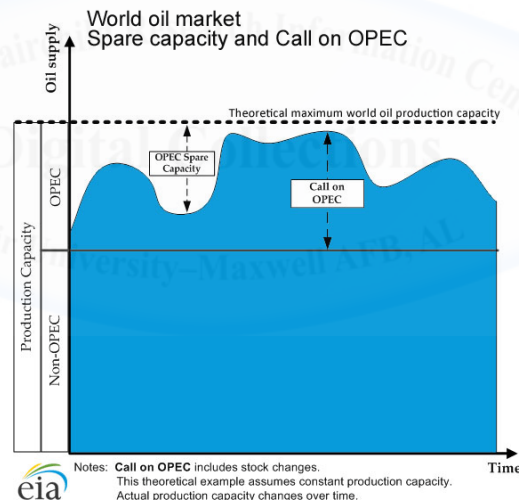


Figure 3. World Oil Market

Source: (Adapted from EIA,

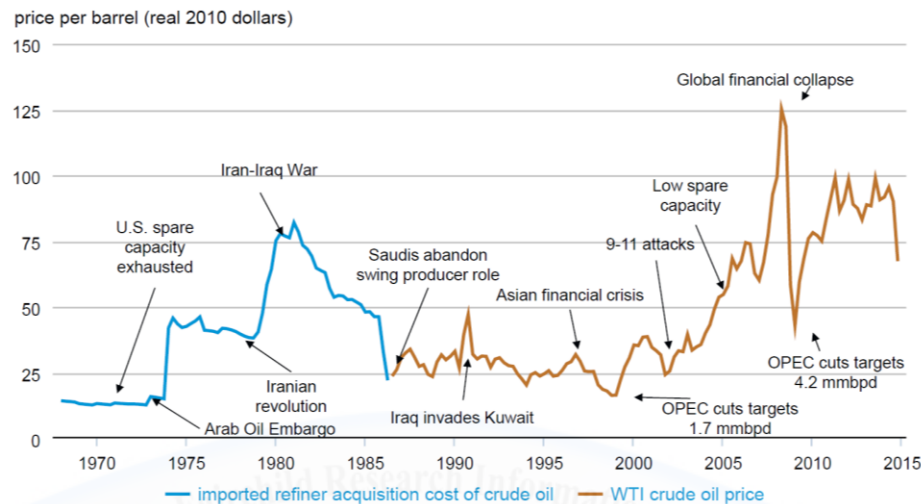
http://www.eia.gov/energy_in_brief/article/world_oil_market.cfm)

The other side of the price equation is the demand for oil. Demand is equally complex and dependent on a multitude of variables. Major factors include industrial production, economic growth and both private and commercial transportation. During the past twenty years, global demand has increased dramatically from non-OECD

⁷² EIA.

countries such as China, India, and South American countries. As depicted in Figure 4, the price of oil has risen five-fold since the late 1990s due to demand and a lack of spare capacity.

Crude oil prices react to a variety of geopolitical and economic events



Sources: U.S. Energy Information Administration, Thomson Reuters

Figure 4: Crude Oil Price History

Source: (Adapted from EIA, http://www.eia.gov/finance/markets/spot_prices.cfm)

Additionally, physical balancing and financial markets affect oil prices. Inventories of oil in transport, refining and even in gas tanks have an effect on prices. If too much oil is in physical storage, the supply decreases causing a price increase. Since the early 1980s, oil has also been included in the financial market trading. Brokers can buy and sell future price predictions and purchase spreads on how large or small the difference will be between predictions and reality. Because supply and demand are uncertain, brokers are engaging in speculation of oil prices and can affect the price. Moreover, macroeconomic trends such as stock exchanges, interest rates, and exchange rates can move the price of oil significantly.

While the current price of oil has many variables, none is more important today than the spare capacity of OPEC. Furthermore, with more than half of OPEC countries located in the Middle East, the spare capacity of the Middle East matters. According to Figure 4, most significant price changes are a result of OPEC changing the status of spare

capacity. Too much spare capacity leaves all oil producers reeling from a low price. This reeling takes the form of underinvestment and unstable business models. Countries with NOCs and that are dependent on oil revenues for economic vitality cannot endure low prices for long. Conversely, too little spare capacity causes prices to rise to an unaffordable level for most consumers. This has dangerous consequences on economic vitality as well. Therefore, if the stability of global oil trade rests on a predictable spare capacity, then OPEC is important. Unless non-OPEC countries can decrease demand or produce enough supply to supplant OPEC as the spare capacity provider, instability within OPEC for any reason will raise oil prices. Furthermore, long-term instability could overcome the IEA's ability to maintain cooperation, thus possibly posing a threat to the American-led international order. This is a primary reason the United States has security commitments in the region.

This instability can come from numerous sources. Domestic political instability, such as the Arab Spring or terrorism can quickly squelch the flow of oil. Organizational instability within OPEC can also affect prices. One state producing excessive oil can lead to infighting. The price crash of 1986 and 2015 are partly examples of organizational disagreements. Because Saudi Arabia has the preponderance of cheap oil, it can lower the price of oil past the break-even point for other OPEC nations, still generating profits when others cannot. As mentioned earlier, OPEC suffers from the same ills the most commodity cartels do: infighting over price.

Incidentally, the introduction of Enhanced Oil Recovery (EOR) techniques changes this dynamic. With more IEA members investing in these techniques, spare capacity may be within reach of non-OPEC members. The IEA, with a sizable spare capacity, could balance OPEC and have it back down from cartel operations. While this is yet to be seen, there is hope for the future.

Conclusion

Oil is vital to the world. How nations secure oil is part of a much larger international order that has been in place since the end of World War II. While the order has been chaotic at times, its defining characteristics have been stability and cooperation. These characteristics owe much to the international regimes that comprise the constitutional order that America erected after 1945. The global oil market is both an

enabler and a product of the permissive international order. The oil market is one of many trade operations that have this characteristic, but the order and the oil market must be protected. The next chapter will explore how America does both.



Chapter 2

America, Order, and Oil

Any successful strategy to ensure the safety of the American people and advance our national security interests must begin with an undeniable truth—America must lead. The question is never whether America should lead, but how we lead. –US President Barack Obama, 2015 National Security Strategy

America has an important role in today's international order. America is the leading state in the post-World War II constitutional order and underwrites its security and economic stability. By leading, America advances its prestige and reaps the benefits of the order it helped build. This leadership is the responsibility of America as the leading state. Regardless of oil imports, America would protect the order that has served the world so well.

This chapter examines the multifaceted association of America, the international order and oil. While the previous chapter connected oil to the international political order, this chapter connects America to both. By doing so, a pattern emerges that explains the interdependence between the three. This pattern of American cooperative behavior through institutions is what I seek to demonstrate. While not always perfect, the American-led order has spread prosperity to the world like few others.

As a result, America should continue to engage institutionally in the international order. By espousing American leadership in security and economic realms along with participation in regimes, America sustains the great prestige it has acquired through the constitutional order. Moreover, America should be cognizant of the signals it sends to the rest of the order through policy. Just as American promises to lead in security and economics inspire confidence, so do other signals. America has oil laws in place today that are harmful and counterproductive to the American-led order. Specifically, the crude oil export ban reflects a nationalistic bias for oil independence and is an artifact of the pre-oil regime era. The American-led order would fragment if all nations enacted similar

laws. Why then does America still have these? This chapter also explores how America can better use its oil to fortify the order.

Security Commitments

America has vast global security commitments. The American military participates in activities ranging from US homeland protection to African Ebola relief. These military contributions help promote US national objectives and American prestige and influence worldwide. The protection of oil falls within this range of activities. However, as American oil imports wane, what will become of American protection of oil? I argue that oil trade is part of a greater international order that America protects. Based on the benefits America receives from the order, it should not retract from its protection. Besides, America's allies and partners depend on oil for security and economic contributions to the international order. As constitutional order theory predicts, underwriting international security is the cost for the continuation of the American-led order.

Accordingly, the international order must provide for the protection of the oil market. Similar to other areas that require security (i.e., aggression against state sovereignty), the United States shares the burden with other members of the order. However, as the state with the preponderance of power, America shoulders the heaviest burden of that protection.

The 2015 *National Security Strategy (NSS)* and the 2012 *Defense Strategic Guidance (DSG)* affirm that the international order described in the preceding paragraphs is still in our national interest. As cornerstones of American national and military strategy, these documents affirm to the world that America will lead now and into the future. The NSS begins by listing America's enduring security interests. To begin with, a US interest is "a rules-based international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges."¹ An additional enduring interest, relevant to the context of oil within the international order, is "the security of the United States, its citizens, and U.S. allies and partners."² The NSS further defines several strategic risks to these interests; however,

¹ The White House, *2015 National Security Strategy*, (Washington, DC, 2015) 2.

² The White House.

important for this work are major energy market disruptions.³ Using these statements, one can conclude that the United States would act to prevent or mitigate a major energy market disruption to protect American security, the security of its allies and partners, and the international order.

The United States also acknowledges its general security commitments in support of the international order. While reduced from the height of Cold War commitments, America still provides credible security to regions and the global commons. The NSS states, “The United States government has no greater responsibility than protecting the American people. Yet, our obligations do not end at our borders. We embrace our responsibilities for underwriting international security because it serves our interests, upholds our commitments to allies and partners and addresses threats that are truly global.”⁴ As described earlier, America is willing to underwrite security because it created and maintained the order. American interest and international prosperity are furthered as a result.

America’s allies and partners likewise depend on oil for security. Without oil, petroleum-dependent states would cease functioning as they are today. Much in the same way that the 1973 Oil Crisis caused friends, allies and partners to compete, a political decision by a major exporting country or a closing of a strategic transportation route could cause this again. While the IEA is in place to resolve short-term problems in oil supply, America finds it advantageous to protect the global oil market from long-term frailty. Besides, if states lose confidence in the security of the order, they may take security matters outside of cooperative channels to secure their oil. This could facilitate a breakdown of the order similar to the aftermath of the post-World War I settlement, which lacked security guarantees.

Because oil is essential to the current order, American security strategies imply it is worth the cost of defending. With reference to the importance of oil to US allies, the NSS states, “we still have a significant stake in the energy security of our allies in Europe and elsewhere.”⁵ The NSS also references the importance of the free flow of commerce

³ The White House.

⁴ The White House, 7.

⁵ The White House, 16.

associated with the freedom of navigation to the international order.⁶ The DSG specifies the military commitment to Middle East, which includes more than half of the world's proven oil reserves by stating, "to support these objectives, the United States will continue to place a premium on U.S. and allied military presence in—and support of—partner nations in and around this region."⁷ Furthermore, the DSG acknowledges that the American military will continue to assure access to and use of the global commons for trade (reference Figure 1 for strategic chokepoints within those commons).⁸

The international order is important enough to America that it will continue to protect the oil trade system. Even if for oil trade alone, the stake America has with its allies and partners is worth the price. The security regimes that America participates in with those allies, such as NATO, are vital to fostering a secure international order.⁹ Furthermore, the price of oil for allies and partners would increase dramatically if America suddenly ceased underwriting security while the secondary and tertiary effects on security and economic regimes would possibly be severe. Moreover, since America has had the largest burden of protecting the order, few, if any, other countries have the capacity to assume the role. Likely the only way that America relinquishes the leading role in security is through a hegemonic transition, either peacefully or by war.¹⁰ This does not appear likely based on the investment America has made in the international order. American prestige still seems high in the eyes of most of the world, and there is not another nation actively pursuing change in the order.¹¹

Nevertheless, America has a security interest in the oil it imports. While US imports are diminishing, the majority of America's imports today come from the Western

⁶ The White House, 13.

⁷ Department of Defense, *2012 Defense Strategic Guidance*, (The Pentagon, 2012), 2.

⁸ Department of Defense, 3.

⁹ NATO, "Operations Archive," <http://www.aco.nato.int/missionarchive.aspx>, (accessed 23 Mar 2015). NATO was an institutional response for many security operations. Notably, Operation Allied Protector protected the global common areas off the Horn of Africa. Non-state pirates seized many nationally flagged and commercial vessels that were held for ransom. As part of the international order, these security regimes bolster confidence that promotes prosperity.

¹⁰ Gilpin, *War & Change in World Politics*, xx.

¹¹ America still has the largest GDP and military in the world. Combined with American military involvement in mostly UN sanctioned events, America also has credibility. Thus, America prestige is still high.

Hemisphere.¹² Less than 20 percent daily comes from the Eastern Hemisphere. Yet, America still protects the global market because the price it pays relies on all consumers having physical access. If an actor or state denied physical access, the global price would increase. A significant and sustained price increase is a threat to the American-led international order. As an illustration, the record price increase of oil to \$150 per barrel in 2008 was at least partly responsible for the global economic collapse that ensued. The economic collapse left states worried about economic contagion and a return to nationalism, as happened during the Arab Oil Embargo of 1973, which produced doubt in American leadership and set friends, allies and partners to competing. The Bretton-Woods Agreement hoped to avoid this situation by promoting economic openness and cooperation. Even though Bretton-Woods is no longer in effect today, the spirit of economic openness remains throughout the order.

To illustrate further America's commitment to the international order, let us exclude the oil market from security consideration. Hypothetically, if enhanced oil recovery techniques solved all extra-national oil dependency problems and the oil global trade no longer existed, what would change with American security commitments? The NSS says America will lead and continue to underwrite security in several areas outside of oil. The security commitments in Asia and Europe would still be relevant, as these are America's closest allies and trading partners.¹³ Another European or Asian continental war would certainly entangle America at some point and be much worse than prevention would have been. Furthermore, the United States actively combats terrorism globally to mitigate a global threat.¹⁴

Moreover, the US military would remain committed to freedom of access to the global commons for trade. The open and free trade system is a hallmark of the American-led order. Global trade has raised the global standard of living dramatically since the onset of globalization.¹⁵ In addition, oil is just one of the many commodities

¹² EIA, "US Net Imports by Country,"

http://www.eia.gov/dnav/pet/pet_move_net1a/EP00_IMN_mbbldpd_m.htm, (accessed 4 March 2015).

¹³ The White House, *2015 National Security Strategy*, 10.

¹⁴ The White House, 9. There is little evidence that shows a link between combating terrorism in the Middle East and the perceived thirst for oil by the developed world. While a common theory, there is little proof that if the world ceased needing oil that terrorism from the Middle East would stop.

¹⁵ The global standard of living refers to many factors. The increase in life span, access to medical care and income per capita all point to an increase in global standards. There are always exceptions to this

traded using sea lines of communication. According to the World Trade Organization, oil accounts for just under 20 percent of all global goods traded.¹⁶ Oil is significant, but still a small subset of global trade.

Ironically, there are some areas that the United States takes security action without institutional support. Even though America leads the institutional order, it still sometimes acts in its interest. Take the global oceanic commons as an example. The United States, through its Navy, routinely patrols and enforces freedom of access to the global common areas, often without an institutional mandate.¹⁷ While an international regime exists for the global commons, the United Nations on the Law of the Sea (UNCLOS), the United States has yet to ratify it. America's opposition to ratifying the regime rests on the notion that it "would cede sovereignty to an ineffective United Nations and constrain U.S. military and commercial activities."¹⁸ Yet, proponents of ratification say, "the United States remains among only a handful of countries to have signed but not yet ratified the treaty—even though it already treats many of the provisions as customary international law. By remaining a nonparty, the United States lacks the credibility to promote its own interests in critical decision-making forums as well as bring complaints to an international dispute resolution body."¹⁹ While both sides have validity, a comparison of this issue to constitutional order theory yields interesting results. By pursuing global maritime security outside of institutions, the United States is sharing an excessive cost burden. Conversely, without United States support, as the leading naval power, the regime is hollow.²⁰ This juxtaposition represents the conundrum of the leading state. Use institutions and get most of what you want, or do not use them and pay the cost of an "illegitimate" transaction. The leading state cannot

controversial statement, such as standard of living is in the eye of the beholder and the negative consequences of free trade, but on a whole, objective data points to a higher standard.

¹⁶ World Trade Organization, "International Trade Statistics 2013," https://www.wto.org/english/res_e/statistics_e/its2013_e/its13_merch_trade_product_e.htm, (accessed 4 March 2015).

¹⁷ Council on Foreign Relations, "The Global Oceans," <http://www.cfr.org/oceans/global-oceans-regime/p21035#>, (accessed 23 March 2015).

¹⁸ Council on Foreign Relations.

¹⁹ Council on Foreign Relations.

²⁰ Council on Foreign Relations.

have it both ways. Moreover, the adage of “lead by example” seems to matter here, as will be analyzed in the following section.²¹

In summary, America is committed to leading today’s international order. That order is based on cooperation through institutions with allies and partners. The history of the order places the cost of security on America’s shoulders, and it has been willing to pay this price to preserve the order. Oil is also a part of today’s international order. America and her allies depend on petroleum for security and thus work together to protect oil. Even if America no longer imported oil, she would still protect the oil market because it is part of the American-led international order. Besides, the United States has many military commitments that overlap with the protection of the oil trade system, each pertaining to maintenance of the international order. Therefore, since America has a stake in upholding the international order, security commitments would likely not change regardless of domestic oil sufficiency or independence.

Economic Considerations

In addition to the security aspect of the international order, America leads the economic aspect of the order. The question of this thesis is how the oil revolution in America would change security commitments. An underlying concept hidden in this question is that, should America become oil-sufficient, it would keep its oil for supply security or sell it. The previous section hypothesized that American commitment to the security of oil would stand regardless import status. Building upon that hypothesis, the next question is what America should do with its oil discoveries. Should America keep the oil, which is current policy, or sell it on the oil market? I argue that the United States should sell its oil. Two reasons support this argument. First, it sets the example for the

²¹ The United States often signs these agreements and conventions but is hesitant to ratify them. According to the US Department of State, signing can signal the US support for the overall theme of the agreement, but ratifying incurs that the US is legally bound to all points in the convention. The United States, by postponing ratification, has avoided the perception problem of breaking the treaty. The probability is usually low that the finer points will be tested, but the United States avoids this by prolonging ratification. However, signing of conventions indicates the United States support and willingness to abide by agreement norms. Usually, this creates a misperception of the US intent. In the case of UNCLOS, the US signed, enforces most of the norms, but is hesitant to give up national sovereignty. The benefit to the international order is tremendous because the United States protects most trade regardless of convention ratification states. US Department of State, “Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (Geneva Protocol),” <http://www.state.gov/t/isn/4784.htm>, (accessed 25 March 2015).

rest of the international order and adds to American prestige. Second, selling America's newly discovered oil is economically beneficial to the nation.

Throughout this section, I use the Emergency Petroleum Allocation Act of 1973, which banned US crude oil exports, as an instrument to illustrate America's economic role in the international order. This ban is counter-productive in today's order and is an artifact of the pre-regime era. Since the inception of the IEA, the global oil market has had a successful oil consumer regime that promotes confidence and stability in the market. The American oil export ban further proves the utility of regimes in today's order. The impetus for the export ban is petroleum nationalism, an idea based on a competitive, non-cooperative and insecure oil trade. While the IEA has not eliminated this entirely, it provides a mechanism for members to cooperate, communicate and adjust policies to meet mutual goals.

To begin with, the liberal economic international order provides nations a low-risk venue for economic prosperity. American leadership in this venue is essential as it carries the bulk of economic power. Furthermore, American participation in regimes that comprise the order is critical to their relevance. The World Bank and the International Monetary Fund are examples of international regimes founded during American hegemony following World War II and still in function today. These regimes advance American prestige by encouraging economic prosperity through economic openness and trade partly based on American participation. Likewise, economic transparency has inspired the trade that has transformed the world.

Trade is the economic engine of the world. It increases prosperity at remarkable rates.²² Since the end of World War II, the institutions initiated by America and other victorious powers have propagated open trade.²³ While serving American interests, this trading system moved the world away from the competitive economic blocs of the 1930s.²⁴ With the exception of the Soviet sphere, the world participation in open trade has brought unprecedented levels of economic prosperity.

²² William H. McNeill, *The Pursuit of Power: Technology, Armed Force, and Society Since A.d. 1000* (London: University Of Chicago Press, 1984), 49. McNeill writes about the pervasiveness of technology spread in a market economy and the wealth it brings.

²³ G. John Ikenberry, *After Victory: Institutions, Strategic Restraint and the Rebuilding of Order after Major Wars* (Princeton, NJ: Princeton University Press, 2001), 176-7.

²⁴ Ikenberry.

Oil is a key economic driver of prosperity and is a part of the global trade system. Oil trade's evolution provides evidence of American reliance on regimes for prestige. Immediately following World War II, America used its leading-state status to control oil distribution from not only America but also the Middle East.²⁵ The United States was the central coordinating authority as IOCs set up oil production and distribution to Europe and Asia.²⁶ In essence, the United States was using a hegemonic oil order, albeit a consumer friendly one, to bring stability and cheap oil to the global oil market. Yet, as this position eroded, the United States lost prestige. When "American oil production capacity declined, so did its ability to implement the strategy of hegemonic cooperation—supplying its allies with oil when necessary—that it followed so successfully in the 1950s."²⁷ Other economic areas already had international regimes, but oil was different because of America's superior position with respect to oil supply.²⁸ This all changed once OPEC exploited the erosion of American oil hegemony and instituted the Arab Oil Embargo of 1973. The United States and its allies were forced to deal with the sudden loss of American oil hegemony. Instead of using force or continuing to compete with partners and allies, the United States helped form an international regime to cope. While not a panacea for all collective ills, the oil regime gave a framework for cooperation. Keohane, explaining the value of the regime, writes, "The IEA's principal value, limited though it may be, is a facilitator of agreement, both among governments and between governments and companies. It reduces the costs of coordination by providing information and by mobilizing workable coalitions behind political feasible policies."²⁹

This matters because regimes changed the way the oil market functioned. With regime-inspired confidence, nations observed less risk and made liberal policies. Following the tumultuous 1970s, filled with embargos, competition for scarce oil and the

²⁵ International oil companies drove the price of oil prior to the 1970s. American spare capacity enabled them to do this by increasing and decreasing American production to facilitate the desired price.

²⁶ Robert O. Keohane and with a new preface by the author, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, NJ: Princeton University Press, 2005), 138-139.

²⁷ Keohane, 215.

²⁸ Perhaps American decision makers did not fully appreciate the role oil would play in the second half of the twentieth century. Alternatively, perhaps the motivations were purely fiscally selfish. The fact remains that while other areas pursued institutions, oil did not.

²⁹ Keohane, 237.

emergence of institutional oil regimes, the 1980s brought significant changes to the oil market. Based partly on the stability of the IEA, the perception of oil trade changed. Energy historian Daniel Yergin makes the following observation: “Out of the tumult of the 1970s and 1980s, important lessons had emerged. Consumers had learned that they could not regard oil, the fundament of the lives, so easily as a given. Producers had learned that they could not take their markets and customers for granted. The result was a priority of economics over politics, an emphasis on cooperation over confrontation, or at least it so appeared.”³⁰ The United States also affirmed the priority of economics over politics by removing price controls from the domestic oil market in the early 1980s.³¹ Since the United States was the world’s largest importer of oil, this had a cascading effect on the global oil market. Domestic American oil rose to global market price, thus prompting a refining and product export bonanza and sending American oil products to places that had no demand five years prior.³²

This brings us to the crux of the “isolate or engage” debate: why should America export its oil and products instead of keeping every barrel for domestic use? America participates in international regimes that have allowed the oil trade to flourish, even in the face of discord and challenges. Why should America question the credibility of those regimes and keep its oil for security reasons? I argue that because of the credibility of the regime-backed oil market, the United States should let producers sell American oil on the global market. If the price is more advantageous within the United States, sell to US consumers, whereas if more money can be made abroad, sell there. Regardless of the customer’s location, one global price should keep American consumers paying the same amount while producers can take advantage of currency exchange rates and regional demand to maximize revenues.

Moreover, America is beginning to face a paradigm shift away from a nation driven by oil consumption policies to that of production. As domestic supply moves

³⁰ Daniel Yergin, *The Prize: The Epic Quest for Oil, Money and Power* (New York: Simon and Schuster, 1991), 768.

³¹ EIA, “Petroleum Chronology of Events, 1970-2000,” http://www.eia.gov/pub/oil_gas/petroleum/analysis_publications/chronology/petroleumchronology2000.htm. (accessed 28 January 2015). Domestic crude oil prices were decontrolled and an export ban was lifted on refined products.

³² EIA.

closer to demand, America will have to choose between storing or selling extra oil.³³ Philosopher Thomas Kuhn notes that as paradigms shift, there comes a point where traditional thought no longer offers solutions.³⁴ A new paradigm offers thinking from a new set of rules and viewpoints needed to solve problems. New thinking from different viewpoints will help America shift to the production paradigm. While this will likely not result in a 1950s and 60s style oil policy, there are ideas that will help American production. The concluding chapter of this thesis articulates several of these ideas.

Subsequently, current consumption and production trends help illustrate this paradigm shift. As American oil import dependency wanes, producers will look to maximize profits from newfound production exports. Presently, producers export refined petroleum products primarily because there is a crude oil export ban in the United States. With very few exceptions, producers must keep raw crude oil within the country, which forces US producers instead to export petroleum products.³⁵³⁶ This legislation passed in the mid-1970s as the result of Oil Crisis of 1973. Oil trade has changed considerably since the mid-1970s. Since 2011, the United States has become a net exporter of refined petroleum products, exporting roughly 50 percent of its oil products daily.³⁷ Furthermore, the United States had not been a net exporter of oil products since 1949.³⁸ This raises an interesting point for the isolate or engage question. If producers are already engaged in exporting to the global market without negative impact on American consumers, why continue the crude oil export ban? With a liberal international order

³³ The closer these values, the more refining backlog will occur. Market rules dictate that extraction of oil would decrease because producers are receiving no money for their product.

³⁴ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 4th ed. (Chicago: University of Chicago Press, 2012), 75.

³⁵ After crude oil is removed from the ground, it is sent to a refinery by pipeline, ship, barge, or rail. At a refinery, different parts of the crude oil are separated into useable petroleum products. Crude oil is measured in barrels. A 42 U.S. gallon barrel of crude oil yields about 45 gallons of petroleum products. This gain from processing the crude oil is similar to what happens to popcorn, which gets bigger after it is popped. EIA, "Energy Products Explained," http://www.eia.gov/energyexplained/index.cfm?page=oil_home, (accessed 23 March 2015).

³⁶ EIA, "US Oil Exports," http://www.eia.gov/dnav/pet/pet_move_exp_dc_NUS-Z00_mbb1_m.htm, (accessed 23 March 2015). Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) Alaskan North Slope crude oil; (3) certain domestically produced crude oil destined for Canada; (4) shipments to U.S. territories; and (5) California crude oil to Pacific Rim countries.

³⁷ EIA, "Oil Imports and Exports," http://www.eia.gov/energyexplained/index.cfm?page=oil_imports, (28 January 2015).

³⁸ Blake Clayton, "The Case for Allowing U.S. Crude Oil Exports," <http://www.cfr.org/oil/case-allowing-us-crude-oil-exports/p31005>.

backed by American security and economic regimes, why does this ban still exist? Perhaps this is just the last vestige of American oil nationalism from the 1970s, but it is incongruent with current national security interests. (The policy stance today is that selling America oil abroad would increase American dependence on oil as a way of life, and the Obama administration considers moving away from oil a key interest--a policy is clearly shrouded in environmental concerns.)³⁹ Removal of the crude oil ban will signal to the world that the United States is committed to the international order it espouses. Let us look at three areas for practical reasons to export crude: refining, currency rates, and market supply.

Most American refineries were designed to process heavy, sour imported oil.⁴⁰ The majority of United States crude oil, extracted using EOR techniques, is light sweet oil.⁴¹ The sophisticated refineries along the Gulf of Mexico Coastline can process heavy and light crude while other regional American refineries can only process light crude. Due to the significant cost of the Gulf Coast refineries, it is more cost-effective to process imported and domestic heavy oil, while other refineries process light crude. A domestic oversupply problem is occurring because non-Gulf Coast refineries are at maximum capacity.⁴² Venezuelan, Saudi, and Canadian heavy oils are the primary users of Gulf Coast refineries, as these refineries are efficient at extracting the most product from heavy oil.⁴³ Producers build refineries specifically for a particular type of petroleum. Refiners are also often unwilling to utilize the Gulf Coast refineries for light crude because of the revenues made by refining imported oil and inefficient use of refining capacity. Eliminating the crude oil ban would allow producers to take advantage of the global transport system to refine the light crude elsewhere. There would be extra costs associated with transport, but smaller than the opportunity cost of crude oil sitting in stock. Eventually, this problem will remedy itself by American producers boosting

³⁹ The White House, "Advancing American Energy," <https://www.whitehouse.gov/energy/securing-american-energy>. (accessed 1 Apr 2105).

⁴⁰ Crude oil is called *sweet* when it contains only a small amount of sulfur and *sour* if it contains a lot of sulfur. Crude oil is also classified by the weight of its molecules. *Light* crude oil flows freely like water, while *heavy* crude oil is thick like tar. EIA, "Energy Products Explained," http://www.eia.gov/energyexplained/index.cfm?page=oil_home, (accessed 23 March 2015).

⁴¹ North Dakota and Texas produce light sweet crude.

⁴² Trevor Houser and Shashank Mohan, *Fueling Up: the Economic Implications of America's Oil and Gas Boom* (New York: Institute for International Economics, U.S., 2014), 134-135.

⁴³ Clayton and Levi, "The Surprising Sources of Oil's Influence," 112.

refining capacity, though the problem remains in the short-term.⁴⁴ The lack of capacity results in a few refiners being able to buy oversupplied crude oil at depressed prices, refine and sell it at prevailing market prices to US consumers.⁴⁵ This does not encourage further production, as will be shown shortly.

The next case for allowing American exports is domestic supply considerations. Continued engagement with the global trade enterprise will stimulate American oil supply. If American producers are allowed to sell crude abroad, this should incentivize new oil discoveries. This resembles what occurred when oil prices skyrocketed most recently in 2007.⁴⁶ A handful of Texas drillers repeatedly attempted to locate new supplies and techniques until successful. Because America allows landowners to own mineral rights, there is a high incentive for entrepreneurs to find and extract oil. Moreover, this encourages production investment in the United States versus overseas.⁴⁷ Furthermore, this would allow the United States more oil security in a time of national emergency, such as global war or pandemic.⁴⁸

Finally, currency rate differences allow American exporters (and importers) to take advantage of the relative strength of the dollar against other currencies. For instance, an American exporter sells his product overseas, so when the dollar is relatively strong, his product will be less competitive because it takes more foreign currency to buy the dollar. Vice versa if the dollar is weak, as the American exporter can expect to sell more because his product is relatively cheaper. Traditionally, oil and the dollar have had an inversely proportional relationship. Because oil is priced in dollars, when oil prices are high the dollar is weak globally and vice versa. Therefore, if oil prices are high, American producers should be able to export crude abroad because of its attractive price, based on the weaker dollar.⁴⁹ On the other hand, when oil prices are low, producers

⁴⁴ The EIA confirms this as of 2015. IOCs have planned new refineries in Texas and North Dakota while several expansions to existing refineries are already occurring. EIA, "US Refining Capacity," <http://www.eia.gov/tools/faqs/faq.cfm?id=29&t=6>, (accessed 31 March 2015).

⁴⁵ Clayton, "The Case for Allowing U.S. Crude Oil Exports," <http://www.cfr.org/oil/case-allowing-us-crude-oil-exports/p31005> (accessed 3 March 2015).

⁴⁶ This is a repeated event in American history, dating back to the 1870s in Pennsylvania where oil was first discovered in the United States.

⁴⁷ Clayton, "The Case for Allowing U.S. Crude Oil Exports," <http://www.cfr.org/oil/case-allowing-us-crude-oil-exports/p31005> (accessed 3 March 2015).

⁴⁸ Clayton.

⁴⁹ Houser and Mohan, *Fueling Up: The Economic Implications of America's Oil and Gas Boom*, 60.

should have the choice to sell domestically in the face of a strong dollar. Since 2000, oil has been relatively expensive and the dollar weak. As the world demands more oil and prices remain high, American producers should be able to export. Conversely, American consumers would still pay the same price because of the global price of oil coupled with increased global supply.

A common counterargument to remaining engaged in the global oil market is protection from volatile price spikes. A price spike from a regional conflict, such as the Iran-Iraq War or the NATO intervention in Libya, is usually short-lived. The IEA is well equipped to deal with any short-term crisis. Conversely, a price increase from a major war would likely be sustained and would wreak havoc on the current global trade system. But, this is unlikely given the current international order. Outside of geopolitical events, economic motives could also cause a major price adjustment. The rapid modernization of India and China during the 2000s, combined with speculation on oil futures, caused the price records of 2008. Usually, institutional regime assistance or a global demand decrease resolves these price spikes. Nevertheless, if America engages in the global oil market, it will be subject to high oil prices if they occur. However, the opportunity cost of insulating America from the global oil market is too high for the reasons listed above.

In summary, oil trade benefits the American economy. By remaining engaged in the global oil market, America can reap the benefits of not only the international order it protects, but also the innovation its citizens have produced. Additionally, nationalistic laws are counter to the liberal international order. America leading by example matters to the members of order.

Conclusion

America is the leader of the current international order. Formed after World War II, this order has persisted with America at the helm for more than 70 years. Institutions are the trademark of this order. Using security and economic regimes the United States has secured stability and built upon it. Economic prosperity followed. America will protect this order using both its power and prestige. The United States will protect it regardless of import or export status or even for another nation. It has to because the order is too important to let unravel. Next, we will examine the United Kingdom's understanding of this logic.

Chapter 3

Historical Case Study

Britain is a tragedy – It has sunk to borrowing, begging, stealing until North Sea oil comes in. –Henry Kissinger, US Secretary of State, 1975

Unless we change our ways and our direction, our greatness as a nation will soon be a footnote in the history books, a distant memory of an offshore island, lost in the mists of time like Camelot, remembered kindly for its noble past. –Margaret Thatcher, UK Prime Minister

The United Kingdom (UK) has a rich and complex history from which nearly all nations can learn. This chapter examines part of that history, particularly the UK's oil discoveries and subsequent policies from 1970-1990. The UK, a global power that achieved oil-sufficiency in 1980, provides a case study from which America can draw oil-related economic and security lessons. Recalling that I previously argued that America's role in the international order is too prominent to withdraw militarily or economically, the UK's case should offer insights for strategists. Its similarity to the current US situation is remarkable given that it occurred within a constitutional order. Furthermore, this chapter should test the constitutional-order framework against a major power that could have established oil self-sufficiency yet chose to remain committed to the international order.

This section uses the following roadmap for case study evaluation. First, I explain the motive for choosing the UK. I also highlight the similarities and the differences between the United States in 2015 and the UK of the 1970s and 1980s. Second, I explore the economic factors associated with the UK's oil discoveries. I seek to answer why the UK produced oil in the manner it did. Third, I seek the motive behind changing British security commitments. Finally, I compare and contrast the UK's oil history to the international political framework developed in the first chapter. I hope to validate the selected international political order theory's explanatory power.

Case Study Criteria

Case studies are a useful tool to evaluate a theory. They also offer an opportunity to test and connect the theory to real events. While no two situations are exactly alike, matching the antecedent conditions provide higher fidelity results. Specifically, this case study explores the actions of a great power as it wrestled with oil self-sufficiency and as a test of the framework. Both may have useful implications for policymakers in the present.

The criterion for selecting this case study was finding a nation similar to America today. There are several key contextual factors. First, the country that serves as the subject of a case study must have a diverse economy. Nations that rely heavily on oil exports for revenue tend to behave differently from those with a diverse economy. The export revenue cutoff for this study is 25 percent of total government revenue. By way of comparison, Russia and Venezuela obtain over half of their government revenues from oil.¹ If oil exports are curtailed, the nation has few options to generate revenue and is prone to act rashly. Second, the selected nation must contribute to regional or global order. This contribution could be through global or regional security regimes. This demonstrates how a state behaves after it domestically satisfies a critical need. Does the nation follow commitments to the international order or renege? The preference is, however, for a state that contributes to global order. Third, the case state must be developed and depend on oil imports. A high demand for oil imports implies that a nation uses the global oil market. (Some developed countries rely less on oil imports than others, as Russia or Canada do.) Finally, the case nation must have made a discovery or innovation that reduced dependency on oil imports. Preferably, the nation becomes self-sufficient and can curtail participation in the global oil market. Several countries meet some or all of these criteria.

Brazil, Japan, and the UK were considered as potential case study countries. First, Brazil is a country on the rise in most global standings. The largest country in South America, Brazil's recent oil discoveries in the offshore areas are astounding. Furthermore, Brazil expects to increase its petroleum exports by 50-75 percent over the

¹ Thane Gustafson, *Wheel of Fortune: the Battle for Oil and Power in Russia* (Cambridge, MA: Belknap Press, 2012), 360.

next decade.² In light of these key indicators, Brazil has the following similarities and differences. First, Brazilian government revenues from oil production are less than 25 percent.³ Second, Brazil contributes to regional security within South America and is slowly beginning to contribute to global security, especially in places where it has resource investments, such as Africa.⁴ Third, Brazil has a growing dependency on oil imports based on continuing development. Last, Brazil's oil discoveries have reduced import dependency, but these discoveries are expensive to develop. Based on the location of the oil fields, costly and timely technological advancements are required to extract oil in deep water. Many of these fields are coming online and should begin increased production within the next decade.⁵ Overall, Brazil is a promising case study, but the lack of a mature commitment to global regimes and the international order hinders it. Furthermore, the recency of Brazil's oil developments in conjunction with its recent gain in global prominence exposes a lack of evidence as to government policy direction. Within the next decade though, Brazil's choices will be interesting to watch.

Japan, on the other hand, is a developed country that is a major economic power. Until recently, Japan substituted nuclear power for some of its oil needs. This substitution decreased consumption of petroleum products over the past 20 years. Nevertheless, Japan now imports over 90 percent of its petroleum; prior to the 2011 tsunami and the elimination of nuclear power, Japan only imported 80 percent.⁶ While nuclear power reduced oil import dependence, the lack of regional and global security commitments disqualify Japan as a case study. While in an institutional security agreement with the United States, Japan is constitutionally prohibited from any military besides self-defense forces. Therefore, evaluating the actions of Japan's commitments post-nuclear power is not illustrative for US policy makers.

The UK appears as a promising candidate. As a moderately powerful nation, the UK has security commitments of regional and global variety. Post-World War II, the UK began an energy transition from coal to oil. Prior to the 1970s, this transition created a

² EIA, "Brazil," <http://www.eia.gov/countries/country-data.cfm?fips=BR#pet> (accessed 23 February 2015).

³ Central Intelligence Agency World Factbook, "Brazil," <https://www.cia.gov/library/publications/the-world-factbook/geos/br.html> (accessed 23 February 2015).

⁴ The White House, "Factsheet: US-Brazil Defense Cooperation," <http://www.whitehouse.gov/the-press-office/2012/04/09/fact-sheet-us-brazil-defense-cooperation> (accessed 23 February 2015).

⁵ EIA, "Brazil," <http://www.eia.gov/countries/cab.cfm?fips=BR>.

⁶ EIA, "Japan," <http://www.eia.gov/countries/cab.cfm?fips=ja> (accessed 23 February 2015).

heavy dependence on oil imports. However, oil was discovered in the North Sea, and the UK began producing it for domestic and export uses. Oil export revenues never reached higher than 25 percent of total government revenues, thus indicating a diverse economy. Furthermore, since the UK's oil discovery occurred over 40 years ago, scholarly analysis exists for this period. These reasons combine to make the UK a relevant case study.

The United States faces a similar situation. First, America's oil revenue does not exceed 25 percent of the total government revenues. As of 2015, oil tax revenues accounted for less than two percent of government revenues.⁷ Second, the United States has major international security commitments. Third, America depends on oil imports. Last, recent oil discoveries and innovations have lessened the requirements for oil imports while placing America on the path towards oil-sufficiency.

While the key similarities are obvious, some of the differences between the UK and America are significant. First, the UK economy had contracted severely at the time of the North Sea discoveries, affecting how British policy makers perceived their oil options: keep or sell it. Second, United States security commitments dwarfed the UK. While the UK still provided the second-most commitments to security regimes and international order, it seemed to follow the United States' lead. Thus, discovering the motives behind UK security policy changes may prove to be challenging. Last, the UK was already in the process of retrenching its imperial and Commonwealth commitments at the time of oil discovery. Oil is not causal to retrenchment, as the UK established the policy before the North Sea discoveries.

Economic Considerations for North Sea Oil

How did the UK use its oil discoveries in the North Sea? Great Britain produced and exported a substantial amount of oil versus retaining it for future British oil security. Were there acute needs to export the oil for capital gains, or did the British government not regard oil security as compelling enough because of the international political environment? This story begins with the context surrounding the British oil discovery.

Post-World War II, Great Britain shepherded in an era of socialism with the support of a strong national consensus. Partially rooted in Keynesian economic theory,

⁷ Energy Tomorrow, "US Energy Taxes," <http://energytomorrow.org/economy/taxes/> (accessed 23 February 2015).

these changes produced economic boom times during the 1950s and 1960s, mostly based on the monetary benefits of former UK colonies still using the British pound.⁸ National healthcare, comprehensive national pensions and nationalization of key industries to include coal and railroad highlight the changes. At the same time, Great Britain jettisoned imperial commitments by converting them to commonwealths, thus allowing money to flow back to the UK.⁹ Collective bargaining also thrived as many sought union protection, while industries strained to remain competitive against state-subsidized enterprises.¹⁰ Hidden under this veneer of social democracy was an economy struggling to absorb more state debt with each day.

As with United States, the UK enjoyed vast commercial and private mobilization because of cheap oil imports. Oil historian Norman Smith summarizes UK oil use in the following excerpt:

After the Second World War, the British economy had moved away from its dependence on domestically produced coal towards increasing reliance on imported oil, exposing the visible trade balance to events in world oil markets, as was dramatically illustrated in 1973-1974. Between 1968 and 1972 alone, oil increased its share in primary energy use in the UK from little more than 40% to approaching 50%. Although much of the increase reflected the growth of private motoring, there were also other factors, such as replacement of coal by refined petroleum products in the gas and railway industries and the construction of oil-fired power stations. As long as oil was cheap (long the case prior to 1973), the growth in imports gave relatively little cause for concern.¹¹

The combination of subsidized national industries and increased government borrowing to pay for oil associated with these industries proved dangerously risky.

During the 1960s and early 1970s, British officials seemed oblivious to supply security problems. Despite the vulnerability of import-dependent, state-run industries, officials believed cheap oil was permanent. In fact, the fuel policy of the UK during the

⁸ Christian Caryl, *Strange Rebels: 1979 and the Birth of the 21st Century* (New York: Basic Books, 2013), 4.

⁹ A key difference between an empire and a commonwealth is the sovereignty of the territory. With independence granted to imperial colonies, cooperation was not subject to hegemonic control. Thus, cooperation suffered as a result, among other things.

¹⁰ Caryl, *Strange Rebels: 1979 and the Birth of the 21st Century*, 5.

¹¹ Norman J. Smith, *The Sea of Lost Opportunity, Volume 7: North Sea Oil and Gas, British Industry and the Offshore Supplies Office (Handbook of Petroleum Exploration and Production)* (Oxford, UK: Elsevier, 2011), 4.

early 1970s stated the following: “There are a number of reasons for expecting oil prices not to increase. . . Competition is strong both between companies and between sources of supply, and the surplus of crude oil seems likely to persist for many years despite the expansion in world demand.”¹² This fuel policy was also set amidst a surging global demand and a plunging American spare capacity. Nevertheless, the British had discovered offshore oil fields in the North Sea. Oil production would take some time, likely ten or more years due to advanced drilling techniques. British leaders initially seemed more concerned with commercial exploitation versus supply security.¹³ After all, few anticipated the events of 1973 and the effects the year would have on the British economy.

The British economy was critically reliant on cheap oil by 1973. The Arab Oil Embargo of the same year, while not directly aimed at the UK, increased global prices because of the supply reduction to the United States. Britain suddenly found itself paying double or triple the price for oil and the national balance of payments quickly went negative.¹⁴ The spike in oil prices had further effects within the UK. As the nation struggled to pay massive debts due to nationalized industries and the welfare state, it simultaneously raised taxes in an attempt to stymie the balance of payments problem, thus causing entrepreneurs and capital to flee the country.¹⁵ The situation became so dire that by 1976, the International Monetary Fund and the Group of Ten nations lent the UK money to prevent a default on British debts.¹⁶ The loans given to the UK were based on the coming North Sea oil.¹⁷ However, Britain was still the “sick man of Europe” as it became economically worse off each year, due to former colonies dumping the devalued British Pound along with national debts of military expenses and foreign aid to former

¹² Donald Iain Mackay, G. A. MacKay, *The Political Economy of North Sea Oil* (Boulder, CO: Westview Press, 1975), 1.

¹³ Smith, *The Sea of Lost Opportunity, Volume 7: North Sea Oil and Gas, British Industry and the Offshore Supplies Office (Handbook of Petroleum Exploration and Production)*, 69-79.

¹⁴ Balance of payments is the current accounts balance for a country. As the UK bought more expensive oil, it had to use credit because it was not exporting enough to keep up with imports. The balance of payments is not restricted to oil but rather all capital goods a country imports and exports. A negative balance of payments undermines a nation’s currency, much like bad credit undermines a consumer’s purchasing power.

¹⁵ Caryl, *Strange Rebels*, 5.

¹⁶ Smith, *The Sea of Lost Opportunity*, 3.

¹⁷ Smith.

colonies.¹⁸ Overall, the UK was in economic shambles that culminated with the “winter of discontent” in 1979 and the election of a new Prime Minister, Margaret Thatcher, who promised radical change during the early 1980s.

While the economic crisis deepened, oil provided a bright spot for Great Britain. On 3 November 1975, the Queen of England pushed a gold-plated button in the Aberdeen control room of British Petroleum to activate the flow of oil from the North Sea to British production facilities. Within five years of that historic moment, the UK reached oil-sufficiency as domestic production equaled consumption.¹⁹ With oil-sufficiency attained, the UK faced tough policy questions. Security of supply was guaranteed for decades if officials put policies in place to reduce production.²⁰ However, more production would mean extra revenue into Britain’s cash-strapped coffers. Prime Minister Thatcher’s reforms would require a balance of payment surplus in order to get international credit. After all, since Great Britain was already geared to trade capital goods that also produced revenues, the answer must have seemed quite easy to the Prime Minister.

Nevertheless, market-based oil production heavily financed Thatcher’s domestic reforms.²¹ Since the Prime Minister cut personal income taxes as part of a campaign pledge, she needed additional money to finance public spending increases.²² Originally, public spending was anathema to Thatcher, but she needed an economic cushion based on the fiscal pain her reforms would cause. Thatcher’s reforms also returned national industries back to private control. This often has excellent long-term benefits by allowing industries, no longer competitive without government subsidies, to cease and be replaced by industries that are more competitive. In the short term, massive unemployment ensued as uncompetitive companies faded away. Thatcher had to contend with upwards of 50 percent unemployment during the early 1980s.²³ Unemployment thus

¹⁸ Smith.

¹⁹ Smith, xx.

²⁰ Slowing oil production through regulation is an interesting problem for nations. Typically, regulation slows oil production but government can also tax to slow. As Russia struggles with today, taxes paid by production companies at high rates do slow production but by an efficient rate. Companies struggle to produce enough to pay off debt and pay government taxes. The typically results in IOCs or NOCs over-producing fields that become depleted long before they should be. Gustafson, *Wheel of Fortune: the Battle for Oil and Power in Russia*, 360.

²¹ Market-based implies consumer friendly oil production. This typically results in a lower price.

²² Caryl, *Strange Rebels*, 183.

²³ Caryl, 188.

generated a need for further welfare support that required public spending. North Sea oil tax revenues appeared to provide the economic cushion Thatcher needed. While not the lone reason, the domestic taxes on petroleum companies, which often approached 90 percent, facilitated Thatcher's reforms and bolstered the UK economy by the mid-1980s.²⁴

Further evidence of the UK's fondness for using oil to fix the economy was the rapid growth of the petroleum export market. The same year that the UK became oil sufficient, oil exports appeared. There is little evidence of any official policy, but the UK did give periodic unofficial reassurances it would remain on the consumer side of the global oil market.²⁵ This implies the UK maximized production at a market rate versus withholding production for the sake of UK domestic supply.²⁶ Referencing Figure 5, the British out-produced consumption and exported crude along with its products. Additionally, the UK imported roughly half a million barrels per day to take advantage of the extra refining capacity for different types of crude blends.²⁷ In other words, other nations utilized British refining capacity.

²⁴ Andrew Marr, *A History of Modern Britain*, Ill ed. (London: Pan Macmillan, 2009), 407. A host of reasons contributed to Britain's rebound. The whole of industry shifted to financials instead of manufacturing in the 1980s, along with several other structural reforms. However, the fact remains that North Sea oil filled the state coffers, thus providing the tinder and kindling for the fire.

²⁵ Steven Rattner, "British Oil: To Pump or not to," *NY Times*, 23 August 1981, <http://www.nytimes.com/1981/08/23/business/british-oil-pump-not-london-this-year-britain-will-finally-achieve-what-all.html> (accessed 24 February 2015).

²⁶ Rattner.

²⁷ EIA, "International Energy Statistics, United Kingdom" <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=54&aid=3&cid=regions&syid=1984&eyid=1990&unit=TBD>, (accessed 24 February 2015).

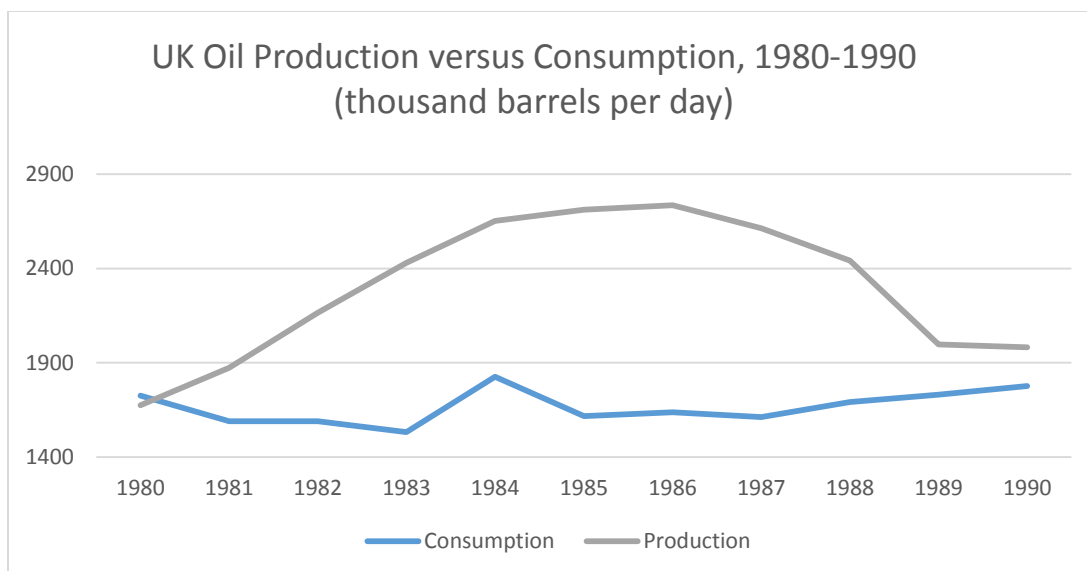


Figure 5: UK Petroleum Production versus Consumption, 1980-1990

Source: (Data from EIA, “UK Country Analysis,”

<http://www.eia.gov/countries/country-data.cfm?fips=UK> accessed 5 March 2015.)

Furthermore, the Offshore Supplies Office (OSO), formed to manage the production of North Sea Oil, had considerable policy commitment toward promoting exports.²⁸ Great Britain certainly had the resources, as a long-time participant in other global trade areas. The OSO, as the government’s agent to ensure oil production, managed this transition closely by encouraging specialized shipbuilding and other oil-export accessories.²⁹

Taxes on oil production, both domestic and exports, swiftly eased the UK’s balance of payment problems. The UK received over \$200 billion dollars in revenues from taxes from 1980-1990, with the high point being 1983-86.³⁰ With a positive balance of payments account, the UK had more freedom to address other national economic problems.³¹ While oil security may have been an early priority for policy makers, the

²⁸ Smith, *The Sea of Lost Opportunity*, 188.

²⁹ Smith, 36-41.

³⁰ Iain McLean, Jim Gallagher, and Guy Lodge, *Scotland's Choices: the Referendum and What Happens Afterwards* (Edinburgh: Edinburgh University Press, 2013), 156.

³¹ Smith, *The Sea of Lost Opportunity*, 170.

dire monetary events of the late 1970s and 80s forced them to contend with their political survival and use tax revenues for vital support programs.³²

The institutional foundation of the oil market allowed Britain the lucrative option to sell its oil. As a founding member of the IEA, Britain used the confidence inspired by the regime not to worry about supply security considerations. While this is one of many reasons why Britain chose to sell its oil, it is an important one. At the peak of British oil export, the oil market had transformed itself into the diverse and efficient system in effect today. If the oil market had remained mired in the political fights of the mid-1970s, Britain would not have generated near the revenue it did. Britain may have even had second thoughts about engaging the export market at all.

Moreover, political actions of the 1980s indicate that economics seemed to override any oil-security considerations. While the 1973 Oil Crisis presumably brought oil security to the political forefront, actions in the 1980s indicate otherwise. Whether commercial producers used global market conditions to set how much oil was produced, or government policy indicated a desire to generate as much revenue as possible, oil was indeed produced and sold at market rates with little restraint. Supply security likely could have lasted several more decades, especially given the additional large field discoveries of the 1990s. Instead, the UK used oil to generate maximum revenue and consequently now imports most of its oil due to reduced North Sea supply.

UK's Dynamic Security Commitments

Despite national economic austerity and oil sufficiency of the 1980s, the UK did not retreat from international security commitments. Instead, the UK increased defense spending and accepted new commitments. If Britain's most vital economic asset was no longer imported, what drove the British to increase security commitments and defense spending? The answer involves the international political context in which politicians made these decisions.

Prior to 1980, the UK had withdrawn from many long-held international security commitments. Post-1945, Great Britain realized it could no longer defend its remaining imperial and colonial possessions. Thus, it initiated a gradual drawdown in defense

³² Smith, 79.

commitments and spending.³³ This proved politically and economically disastrous in the conflict over the Suez Canal in 1956, when Britain discovered how degraded its forces and international prestige had become. The 1957 Defence White Paper then drastically reduced the size of the British military and aligned the UK with the United States as nuclear partners.³⁴ Nuclear deterrence slowly began to replace conventional defense commitments. Then in 1967, the UK Ministry of Defence (MOD) officially ended Great Britain's role east of the Suez Canal and the Mediterranean. Instead, the UK focused its commitments on the European Continent.³⁵ While this "long-retreat" from the British Empire saved much-needed capital, the national economic problems of the 1970s became acute. Great Britain slowly gutted its military from the outside, by canceling international commitments, and the inside, by reducing troop levels.

As mentioned earlier, the UK relied on nuclear deterrence throughout the 1960s and 70s. While nuclear deterrence prevented great powers like the Soviet Union from launching a nuclear attack, nuclear deterrence was less helpful in maintaining an international order. The United States learned this lesson in Korea and Vietnam. The United States was the leading state in the order and was not hesitant about taking non-institutional action.³⁶ The UK was part of the American-shaped order and desired more influence. However, the loss of prestige greatly affected the influence of the UK within the order. The UK discovered this in the 1970s by dealing with Iraqi aggression towards Kuwait. There was a near constant threat from Iraq towards Kuwait after British withdrawal in 1971, and the British had little means to enforce stability.³⁷ This region was of vital importance to the UK because North Sea oil had yet to begin flowing.

These episodes highlight Great Britain's retrenchment from security institutions and its effects on the UK's interest. While the United States was mired in the Vietnam War, and NATO commitments began to erode, it had little capacity to help the UK

³³ Michael Dockrill, *British Defence Since 1945* (Oxford: Wiley-Blackwell, 1991), 31.

³⁴ Dockrill, 65. The MOD prepares a Defence White Paper annually for the Exchequer and Parliament. The paper serves as a statement of threats and British defense posturing. Few are radical in change, most produce only incremental change.

³⁵ Dockrill, 96.

³⁶ The Vietnam War is an example.

³⁷ Richard A. Mobley, "Gauging the Iraqi Threat to Kuwait in the 1960s," <https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol45no5/html/v45i5a03p.htm> (accessed 25 February 2015).

enforce stability in regions it deemed vital. The UK still had heavy trade with many of its former colonies and needed a stable and liberal international order to continue profiting from these. It would take a major disruption to force the UK back into security commitments. That disruption was the Soviet Union abruptly ending détente with the invasion of Afghanistan. Suddenly, the UK had an urgent need to promote defense spending.

Détente was the period of cooling during the Cold War. The United States and the Soviet Union signed disarmament treaties and relations had become less tense between the two superpowers. However, détente began to sputter in 1977, as it appeared the Soviet Union had taken advantage of the West by secretly increasing spending during periods of disarmament.³⁸ Along with the Soviet invasion of Afghanistan and further provocations to the West's international order, détente had transformed into a reheated Cold War by the end of 1979. By this time, the UK had begun to reinvest in defense with mostly personnel and technology modernization. However, a large change was looming, brought about in part by Thatcher and the new US President Ronald Reagan.

Ronald Reagan asserted his worldview with vigor by calling for increased defense spending to counter perceived Soviet aggression. Reagan and Thatcher shared a common belief that NATO should confront the Soviet Union with force.³⁹ The UK was already spending more on defense, dating back to 1977. This spending increase was a European-Continent initiative brought on by American unresponsiveness to increased Soviet military spending, especially concerning a credible counter to Soviet cruise missiles.⁴⁰ The election of Reagan in 1980 reconnected the UK and the United States in the "special relationship" present today. This special relationship, an idealistic shared vision by the two heads of state, caused increased spending that exceeded the Soviets'.⁴¹ These new commitments are codified in the 1981 White Paper titled *The United Kingdom Defence Programme: The Way Forward*.

The 1981 Defence White Paper marked several major changes to Great Britain's defense strategy. Namely, it highlighted four areas of change. (Conspicuously absent

³⁸ Andrew M. Dorman, *Defence under Thatcher* (Oxford: Palgrave Macmillan, 2002), 5.

³⁹ Dorman, 2-3.

⁴⁰ Dorman, 6.

⁴¹ Peter Byrd, ed., *British Foreign Policy under Thatcher* (Oxford: St. Martin's Press, 1989), 11-13.

from this document is any mention of oil-sufficiency, which the UK had already achieved. Also, remember that the balance of payments problem was eased at the time of publication, mostly due to oil revenues.) The following excerpt captures the spirit of the document: “We cannot go on as we are. The Government has therefore taken a fresh and radical look at the defence programme. We have done this in terms of real defence output—the roles our forces undertake and how they should be carried out.”⁴² After setting the stage for change, the document moves on to define the new roles of British defense.

We have now four main roles: an independent element of strategic and nuclear force committed to the Alliance; the direct defence of the United Kingdom homeland; a major land and air contribution on the European mainland; and a major maritime effort in the Eastern Atlantic and Channel. We also commit home-based forces to the Alliance for specialist reinforcement contingencies, particularly on NATO’s European flanks. Finally, we exploit the flexibility of our forces beyond the NATO area as far as our resources permit, to meet both specific British responsibilities and the growing importance to the West of supporting our friends and contributing to world stability more widely.⁴³

Demonstrating commitment to NATO was the primary motive behind increased defense spending. The increased threat from the Soviet Union, coupled with the special relationship with the United States, drove the British to increase annual defense spending by more than three percent per year of their GDP through 1985.⁴⁴ Furthermore, this special relationship with the United States was significant because the UK desired more influence with the United States. By spending on defense in accordance with Washington’s desires, the British were gaining influence in Washington’s decision-making process by increasing British stakes.⁴⁵ The purpose of the UK spending was not only to bolster the alliance against the Soviets but also to influence the international order.

Moreover, NATO had been a central theme of UK security commitments since its inception. However, supporting the international order beyond NATO had recently begun to fade from British security pledges. In fact, the White Paper, *Statement on the*

⁴² UK Ministry of Defence, *1981 United Kingdom Defence Programme: The Way Forward*, 4.

⁴³ UK Ministry of Defence, 5.

⁴⁴ UK Ministry of Defence, 1.

⁴⁵ Byrd, *Foreign Policy under Thatcher*, 18-19.

Defence Estimates 1979, honors the NATO and European commitments but relegates the UK to a regional power. Nowhere does the document mention support of global order or the interest of international friends.

Nonetheless, the 1981 Defence White Paper acknowledges the support of an international order as a core role of British defense. The White Paper states the following about British support beyond the NATO Area: “As the Alliance collectively has acknowledged, changes in many areas of the world, together with growing Soviet military reach and readiness to exploit it directly or indirectly, make it increasingly necessary for NATO members to look to Western security concerns over a wider field than before, and not to assume that these concerns can be limited by the boundaries of the Treaty area. Britain’s needs, outlook and interests give her a special role and a special duty in efforts of this kind.”⁴⁶ The document goes on to detail how the military instrument will be used: “Military effort cannot be the sole instrument, but it has inevitably a part to play. The Government intends to sustain and where appropriate expand our activities by way of military assistance, advice, training, loan of personnel and provision of equipment to friendly countries whose security benefits from our help. But help in these ways needs increasingly to be backed by the ability of our own forces to act directly if our friends need us.”⁴⁷ The document then goes on to list the importance of British maritime defense to the Indian Ocean, South Atlantic, and Caribbean.⁴⁸

The British seemed to match action to policy throughout the 1980s. The Falklands War of 1982 proved the British were unafraid to assert their military might globally, in pursuit of their interests. The Royal Navy also routinely patrolled the Persian Gulf area along with US Naval Forces.⁴⁹ The UK supported the special relationship with the United States by allowing the USAF to launch from British air bases to conduct the 1984 bombing of Libya. The culmination of the British support to the United States occurred during the Gulf War of 1991, when the British provided the second-most forces for the coalition behind the United States.

⁴⁶ UK Ministry of Defence, *1981 United Kingdom Defence Programme: The Way Forward*, 11.

⁴⁷ UK Ministry of Defence, 11.

⁴⁸ UK Ministry of Defence.

⁴⁹ Byrd, *Foreign Policy Under Thatcher*, 85-86.

Perhaps the British were still a regional power that dabbled in global power, but the fact remains, they did produce policy and capital to influence the international order. The special relationship with America likely played a role along with British prestige. Regardless, the British did assign more value to security regimes, in the case of NATO, and did move to support the larger international order. While the reasons are likely a combination of the factors above, several matters are clear. First, the UK did not retract security commitments due to domestic oil sufficiency. No official British defense documents ever mention oil-sufficiency. Second, security regimes mattered to the UK. Whether it be the Soviet threat or trade stability to other European partners, the UK elevated its security posture to assure allies of its commitment. Third, Great Britain realized the value of prestige as it sought to promote the order alongside the United States but also have influence over the United States. The UK probably understood that a competitive and insecure order could have significant negative consequences for its allies.⁵⁰

In summary, the UK did not reduce its security commitments because of oil discoveries or self-sufficiency. Conversely, the UK reversed a trend of reducing international security commitments at roughly the same time of oil-sufficiency. The primary reasons for reversing the trend were to counter the growing Soviet threat and to reestablish a British presence in the international order. British presence meant influence over how the United States managed the international order. While oil played a role in making the policy changes possible, there seems to be no link between oil-sufficiency and the reduction of security commitments abroad for the UK. Security and influence were too important for British leaders to ignore.

Conclusion

The UK offers a test of constitutional-order theory within the context of changing oil markets. Recall that the international political order was constitutional, in which America diffused its power into institutions to extend its power and prestige beyond its inevitable decline. This diffusion took the form of international regimes. These regimes were governed by principles, rules, norms, and procedures, and while not legally binding, they held nations together with a sense of mutual benefit. The weaker nations were

⁵⁰ Byrd.

expected to contribute to collective security, to not be abandoned or dominated. This contribution further gives them bargaining power within security regimes, or a say in how the regime functioned. In essence, the leading state traded its power for influence while the weaker state traded its insecurity for security.

Great Britain, as a weaker but substantial state in the constitutional order, should have acted in predictable ways according to the theory. The UK should have engaged security and economic regimes with its rising power status. Based on the permissive security of an institutionalized, liberal trade order, the theory expects the UK to sell its oil. A further reason is that Britain belonged to the IEA, whose principle was to promote confident and liberal oil trade. Any attempt by Britain to reserve its oil for future supply considerations might have been viewed as an illegitimate transaction. Thus, Britain might have incurred additional costs in some form or another through the IEA or even other regimes.

Additionally, Britain was a participant in security regimes. The principle of the security regime was a collective approach to countering insecurity. Therefore, if a threat arose that required a regime response; the expectation is members would respond. Britain did respond to the regime, albeit more than any other nation on the European Continent. Had Britain been unable to answer, there would have been an illegitimate transaction cost. Perhaps this would have come in the form of financial costs or simply a loss of prestige. As it stands though, Britain followed the institutional rules and norms set forth by the leading state. Using a strictly institutional, or regime, approach revealed a substantial amount of explanatory power for real-world events. Unlike balance-of-power and hegemonic order theory, a constitutional approach explains Britain's actions well. However, other factors in this history confound constitutional order theory.

The explanatory power of constitutional theory does, however, fall short in several areas. The desire for prestige or a return to prestige on the part of the UK, is difficult to explain. The UK did not attempt a systemic change within the order; it just wanted more influence in the order. This is evidenced by the UK spending more on NATO than other European nations and the special relationship cultivated with the United States. Additionally, the UK shifted from lodged within the security regime to a more pronounced role in the order. Like America, it began to pursue its interests outside

of institutions. Constitutional theory, or any of the other theories, does not explain this action. In both of these ways, the UK behaved as if it were a leading or co-leading state in the order. Britain chose to manage its conflict with Argentina alone and pursue its interest on the high seas when war broke out. However, Britain willingly accepted these costs.

Nations likely do participate in institutions when they further their interest. That interest may be security, prosperity, free riding, etc. Nevertheless, if the interest conflicts with the institution or is absent institutions, the nation may act regardless of the cost. The UK case proves this is especially true when former great powers have a national memory of glory days with high prestige. Whatever means and ways the nation uses to approach that golden moment again, including emulating the leading state, are not out of the question.

Overall, the framework does hold value in explaining how a great power reacts to a sudden influx of capital. If the international order was threatened, the nation used the capital to build up the security regime. Furthermore, it used the economic regime to finance the security regime. If the international order was not threatened, there is no way of knowing if the security regime would have been strengthened. It is unlikely that the UK would have done anything to the detriment of the order. Now that the framework is tested against a case study, we move to an application of the theory to America's situation today and ask what will change with America's security commitments in light of its oil discoveries.

Conclusion

The greatness of America lies not in being more enlightened than any other nation, but rather in her ability to repair her faults. –Alexis de Tocqueville

Changes in the character of the global oil market excite people because of the critical role oil plays in the lives of nations and the international order. These changes affect the public's and policymakers' perceptions of how nations should respond. Within America, changes in price (usually increases) prompt cries for a reduction of dependence on oil imports. While this idea has been the goal of every administration since Richard Nixon, the current and subsequent administrations may witness this reality. If America produces enough oil to meet domestic demand, difficult policy decisions lie ahead. One such policy decision is the effect of national oil-sufficiency on international security commitments. This thesis analyzed this policy question through a distinct lens in hopes of ascertaining useful information.

I chose international politics for my methodology. International political theory offers explanations at the grand strategy level of international relationships. Moreover, international political theory has explanatory power for national security and insecurity. It also connects real policy decisions to international relationships. While other methodologies were available, such as organizational theory and collective action, I did not select them. I felt that international political theory best connected oil to the real-world political economy. Other methods could not account for states' actions related to oil the way international political theory could. Furthermore, oil's relationship to the international order, specifically how oil enables it, was the key element of my decision.

Much like a military force, which represents power, oil represents capability within the international political system. However, just as nations need resources to build military power, nations need oil to build an economy and military. Therefore, oil is critical for national security. With this in mind, competition for oil becomes a security matter within a world with no central authority figure. While nations can purchase oil, the international political system has implications for how they go about this task.

Moreover, while oil trade can be episodically characterized as competitive, the cooperative aspects are what characterize it today. Nations decide either to cooperate with the system by not hoarding or bidding up the price of oil or to compete within the system by accumulating and driving up prices. The order within the international system delineates the tradeoffs between a policy of competition and one of cooperation.

International political theory has varying ideas concerning the establishment of order. Order represents the stable arrangement of nations in a competitive and anarchic world. The three contenders were balance-of-power, hegemonic and constitutional. Again, the task was to pick the order that best connected oil to today's arrangement of nations.

Balance-of-power theory explains that order occurs because insecure states will balance each other in terms of power. These states are predominantly concerned with their security, and this motivates their behavior. Cooperation occurs as a product of balancing and is predominantly self-interested. As relative power shifts, so does the balancing of power. For the purposes of oil, this can be characterized as a non-cooperative trade that relies on geographically close partners and contract pricing. Nations are insecure about the access to vital resources and act to make it secure based on the balance of power. Little promotes stability and certainty because the balance is constantly shifting. While the international political order existed like this at times, it has little connection and explanatory power for today's order.

Hegemonic theory explains that order occurs because the hegemon's power and prestige can coerce or influence other states, thus producing a stable arrangement. The hegemon changes the character of the system from anarchy to hierarchy. Nations worry less about security because the hegemon dominates the order. Cooperation occurs out of respect for the hegemon's power and prestige. Oil trade best serves the hegemon's interest, thus inducing cooperation among states for the benefit of the hegemon. However, as the hegemon's power declines, cooperation begins to fray as states seek either their security or the replacement of the hegemon. This can wreak havoc on cooperation within the oil trade and may likely degenerate into the same conditions of balance-of-power order. Furthermore, as Gilpin demonstrated, all hegemons decline and timing is the only question. While this theory has some connection and explanatory

power for the real-world political order of today, there is another order that connects and explains even better.

Constitutional order theory explains that order occurs when a leading state desires to lower its enforcement costs by trading its power to weaker states through institutions. The key difference between constitutional and hegemonic orders is the divestiture of power into institutions. This divestiture often returns prestige to the leading state in terms of wealth, but sacrifices influence and power by giving weaker states a stake. These institutions become sticky and initiate those involved to the principles, rules, norms and decision-making of the institutions for the purpose of increased stability, certainty and achievement of goals. Institutions, or regimes, dominate the international political landscape. Because states exist in the competitive and anarchic system, security regimes are essential to the order. Examples include NATO and the United States-Japanese security alliance. Furthermore, the security regimes promote similar economic processes that are codified in economic regimes. Chapter Two argued that the IEA, WTO, and IMF are examples of economic regimes built atop security regimes. Cooperation occurs inside of these regimes because it provides processes that settle disagreements. Instead of turning towards competitive ways, participating nations can turn toward the regime.

Moreover, the global oil market today trades with the confidence of security and economic regimes. Security regimes offer a stable international order that causes nations to feel secure and engage in the global market versus regional or neighborhood markets. Economic regimes offer free trade and transparency that promote prosperity for the members of the order. Both work in unison to allow an unfettered oil market, which is characterized by openness, free market prices, and access.

The constitutional order theory offers significant explanatory power for today's international political economy. There are some exceptions, which I explain in the next section. Furthermore, I tested this theory against a historical case study that closely resembles America's predicament today. The results should not only justify the selection of the theory but also offer insight for America today.

Constitutional Order Theory

The United Kingdom was a willing participant in the current international order. The UK has participated since the end of World War II, the last major reshuffling of the international political system.¹ The UK is also a security and economic power that discovered a tremendous amount of oil within its borders from 1970 to present. This is the closest match to America, in terms of order, power, prestige and discovery that I could find. The UK used oil to repair its economy. Britain's economy was in shambles following decades of nationalized socialism. Along with national socialism, expensive oil imports nearly exhausted government funds. The UK's balance of payment account required IMF and G-10 loans to keep it from default. The UK also disestablished its empire and rid itself of many of the imperial security commitments. It took these steps at a great cost to national prestige and found its power to be diminishing when addressing crises around the world.

However, Britain discovered oil deep within the North Sea. Production took more than ten years to place Britain on oil-sufficiency status, but the UK then proceeded to produce at maximum rate to finance domestic reforms. As a result, the UK added not only security regime commitments but also non-institutional commitments to the global international order. Even though Britain had achieved oil-sufficiency, it honored the commitments it made to regimes and its friends within the order. Constitutional order theory explains several of Great Britain's actions. By selling oil on the global market, Britain espoused confidence in the stability and security of the order. The order provided the structure, through cooperative regimes, that Britain used. Britain responded as a weaker state should, according to the theory. Selling its oil was the appropriate response, given the UK belonged to the IEA, an international regime. If Britain kept its oil, participants in the order would have suspected price manipulation and may have even begun to compete with Britain.

Furthermore, Britain's participation in security regimes involved increased spending when threats arose. The Soviet Union represented a threat to the international order, and the institutional response was increased security spending to counter the threat.

¹ Some view the end of the Cold War as a major reshuffling as well. There is no denying this but for the purpose of this thesis, the end of World War II is the demarcation point for this event.

If the UK had not increased spending, prestige and possibly membership in the regime would have been questioned.

Overall, the constitutional order theory explains the UK oil decisions better than any other theory. Chapter Three also discovered gaps in explanatory power. Britain's non-institutional spending increase intended to curry influence with the United States, further its interest and promote the international order. The other explanations for gathering influence with the United States include Hedley Bull's definition of international order as a society of friends that pursues the same values. Collective action could also explain how members of a group put more at stake when they desire more influence.

Gilpin's theory of prestige within an international order might best explain the furthered interest and promotion of international order. The UK was once a hegemon and is still considered it a great power by some. Britain was at a critical juncture in the early 1980s relative to its prestige. If she faltered in her commitments, this prestige might have been lost forever. However, Britain did not falter and instead gathered wealth and set an example of how to invest that wealth on power. Thus, Great Britain increased its prestige, and oil was clearly the enabler. We turn to America's situation and use the framework to understand how that theory applies.

Relative Explanatory Power for America

Constitutional order has a reasonable amount of explanatory power for America today. Chapter Three detailed America's role in the order from a security and economic perspective. By instituting a constitutional order, America desired its power to be diffused into institutions for lower enforcement cost and extension of its power beyond the peak. Sustainment of this order is of prime importance to the United States. Specifically, American security strategies stressed the international order as an enduring interest and worth defending, and America has acted as a leading state by forming and engaging institutions to solve concerns within the order.

Constitutional order does not explain why the United States acts outside of institutions. Most of these actions are benign and contribute to the maintenance of the international order. An example is enforcing freedom of access to the global oceanic commons. Perhaps collective action theory better explains these instances. Using

constitutional theory to explain non-institutional action leads back to self-interest and is unhelpful in predicting how institutions solve problems. A possibility is that the United States is agreeable to the illegitimate transaction cost, but this concept requires participation in an institution for validity. Using history as a guide, the future will likely require more institutions if America wishes to continue its prestige.

Strategic Implications

The main point of this work is to demonstrate that America protects the international order for the purpose of the global order's continuation. US national strategies affirm this. Since strategy involves bringing various elements of power to bear for a purpose, strategists must understand the purpose and skillfully use power to that end. Likewise, strategists must know the role oil plays in the international order. Calls from the public and policymakers for oil independence with associated commitment reductions will likely become stronger as US oil supply increases. These concepts ignore the purpose of American security commitments. Furthermore, the strategic implications of the relationship between America, the order and oil can help strategists develop power to match the purpose. If future scenarios reveal an America that imports less oil from traditional sources and also exports oil and technology, there will be consequences. Strategists within the DOD should monitor these developments closely

Nevertheless, if Gilpin and Ikenberry's ideas on the rise and fall of leading states are correct, America will rely more on institutions as it declines. While anathema to most of the American public and policymakers today, fortifying those institutions now is the best down payment on a more secure future that our national leaders can make. Therefore, I conclude this chapter with several strategic implications of our oil bounty based on the anticipatory power of constitutional theory.

First, the US oil boom will result in positive economic gains. Through a combination of jobs, taxes and revenues, analysis indicates America could see more than a two percent gain in US GDP.² This amounts to a larger economic contribution than the economic stimulus package of 2009. While the drop in oil price of early 2015 will curtail oil production and likely lower these figures, there is another effect. Lower oil prices

² Trevor Houser and Shashank Mohan, *Fueling Up: the Economic Implications of America's Oil and Gas Boom* (NY: Peterson Institute for International Economics, 2014),

result in more money available for consumers to spend. This has a similar effect on the national economy as it increases GDP. However the situation resolves itself, either by the price of oil increasing to kick start production or low oil prices padding consumer accounts with extra money, the American oil boom will benefit the national economy.

Strategists should view this as a positive development because the United States is gaining prestige by increasing its economic power. It is too early to tell whether this increase will result in more military spending. Perhaps more important is that increased prestige likely means more influence within the global order. This could provide increased leverage while negotiating institutions or security commitments to volatile regions.

Second, any United States withdrawal from the global oil market due to increasing opportunities for self-sufficiency might actually drive the United States to become more involved in volatile regions of the world. Past purchases of oil from the Middle East have given the United States influence over nations in the region. Saudi Arabia is an example. Since America has traditionally been a consumer of Saudi oil, America has pledged protection and supplied arms. If American imports decrease, Saudi Arabia will seek other buyers for its oil. These new customers will have increased influence, filling a void that the United States has created. Before, America had influence in exchange for oil and promised security, whereas other countries may hold monetary influence and either compete with America for security influence or neglect the region. Other purchasing nations might not be willing to entangle themselves as a credible deterrent to regional conflict, such as intensifying political and security competition between Saudi Arabia and Iran. Either way, America will need further involvement as it cannot disengage because its institutional order is at stake. Institutions might serve as a great instrument to influence the security situations in these regions. If anything, the United States might find itself more committed to these regions than ever before. Continued involvement in the global oil market reinforces that commitment.

Strategists planning for continued American influence over the order should consider the consequences of another oil-purchasing nation holding influence over oil-rich regions. If American allies and partners that require access to these regions are denied, the American military could find itself engulfed in a regional or global conflict

over oil. While unlikely, it is not out of the question and could be an unintended consequence of increased American oil.

Second, the global spread of EOR techniques could lessen the world's dependence on volatile regions and authoritarian nations. This concept has significant implications regarding the international order. Traditional oil-producing states often have overly specialized economies. They are also usually dependent on oil revenue to finance government commitments. However, if traditional consumers become oil-sufficient or begin to flood the market with extraneous supply, the price of oil could plummet.

It is uncertain how oil-dependent states will act if forced to diversify their economies. As an example, the peaceful collapse of the Soviet Union was partially related to a depressed oil price. However, modern-day Russia seems to be much more confrontational, at least partially because of lower oil prices. Rash military action is not out of the question. Strategists should be aware of those nations prone to action by economic threats. If a global supply glut is coming, perhaps stationing American forces near borders could act as deterrents to those nations.

Nevertheless, the possible global rush of increased oil supply is overstated. Economics will dictate how many nations invest in EOR techniques. Without a demand for indigenous oil, nations will struggle to justify expensive EOR investments, especially since the international order provides a stable framework to trade easier produced oil. Few nations offer the unique incentive structure America does that justifies EOR investments. However, continued high oil prices could expedite this scenario. Therefore, it behooves all involved to keep the price affordable. This holds especially true for American policymakers and the effects of oil nationalism.

Third, the crude oil export ban is non-productive and a relic of American history. As examined in Chapter Two, this ban reflects oil nationalism and has not been lifted because the United States had not approached the oil-production level that forces the issue-- now it is relevant, and Congress should end the ban. Security concerns are alleviated because selling oil allows further discoveries and more efficient means of production. In time of national crisis, production could be diverted for national purposes, but until then the constitutional order provides an excellent venue to generate additional

jobs and tax revenues in the United States and to fortify America's commitment to a stable, institutional-based order.

In addition to lifting the ban, policymakers should also minimize regulation of oil production. Regulating oil production is a move toward the price controls of the 1970s and is based on the intent of keeping supply in the ground. This is the same nationalistic thinking as the export ban. The underdevelopment of oil resources could render it unavailable during times of crisis as well as skewing prices for the current market. If the United States is truly worried about the supply of future domestic oil, it could establish a sovereign wealth account to grow the money for times of future resource austerity. Norway adopted this model and reaped the investment return, which stands in contrast to the UK's model of export for revenue to fix economic problems. Since the global order permits the sale of oil while increasing America's prestige within the order, why keep the oil in the ground? Removing all political obstacles to American participation in the global oil market is a logical and achievable goal.

Fourth, current oil trade statistics indicate the world does not think in terms of security, but economics. OECD nations diversify their oil imports and import oil from partners, allies and supposed adversaries alike (US still imports 4 percent of its oil from Russia). If nations predominantly thought of security, oil sourcing would appear much different. Nations would import only from geographically close producers and allies. This provides more evidence that the international order is not balance-of-power or hegemonic type, but a liberal institutional order that inspires confidence, stability and cooperation. Policymakers should heed this fact when considering the oil-export ban.

While this diversity keeps the price of oil low during peacetime, it could be a vulnerability during times of national wartime emergency. Strategists should consider only the indigenous or geographically close oil as available during times of major conflict. Fortunately, the United States has an abundance of oil within its borders and its closest trading partner and ally, Canada, has an abundance of oil as well. The United States is well positioned with respect to oil should a national wartime emergency arise.

Moreover, oil is important to America and the rest of the world. The DOD cares about oil because it is vital to all military operations. America is on sure footing with respect to oil security for many years. This does not mean the DOD can rest on the

laurels of oil production. America must provide leadership by protecting oil access to allies and partners alike. The order that America has built is too important to give in to calls for the retreat of global oil protection, regardless of domestic pressure. Strategists must be able to articulate this argument when pressed by policymakers.

Lastly, America wants and needs the institutional order to continue. Oil is a component of the international order and plays a prominent role in the planning process as our nation's political and military leaders confront global threats. However, oil trade is built on many layers of security and economic regimes that produce cooperation and a stable order. These fundamental pieces of the order are what America must protect, and until the order changes drastically, America will continue to protect them.



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